

## 1.7. LABOUR MARKET AND WAGES IN PUBLIC AND PRIVATE SECTOR

### 1.7.1. Labour market

After a standstill in 2003, and notwithstanding the persistency of an uncertain economic situation, the trends of labour market in Milan become positive again in 2004 (Table 1.7.1 and Table 1.7.2). The growth of the number of employed (+3.8 per cent, against a regional average of +2.2 per cent and a national average of +1.6 per cent) is mostly due to the trend of feminine employment (+6.1 per cent), but above all to the steady growth of independent workers (nearly +13 per cent, against a national mean of +1.4 per cent), which is on line with the growth in the number of firms. This trend is drawn by the service sector (+8 per cent), which compensates the negative performance of the industrial sector (-3.4 per cent).

In this context, which on the whole seems to be encouraging, a worrying element is the increasing number of manufacturing enterprises passing through a crises, which is clearly indicated by the significant increase in the number of worker – either white or blue collars – admitted to the Cassa Integrazione Guadagni (the guaranteed wage fund, +61 per cent, Table 1.7.3). Bad news also when we consider unemployment trends. As already discussed in par. 1.3, in 2004 the increase in the overall unemployment rate was rather small on the whole (4.6 per cent compared to 4.5 per cent in 2003) but more pronounced for the feminine component (6 per cent, compared to 5.7 per cent in 2003); the number of unemployed women rose by 12 per cent if compared with 2003.

**Table 1.7.1 – Employed in Lombardy by industry, 2004 (thousand units)**

	Agriculture	Mining and manufacturing	Energy, gas, water and	Services	Total		Total
					Dependent	Free-lance	
<b>Lombardy</b>	<b>73</b>	<b>1,274</b>	<b>317</b>	<b>2,488</b>	<b>3,060</b>	<b>1,092</b>	<b>4,152</b>
Varese	2	128	32	223	286	99	385
Como	2	89	19	136	186	61	246
Sondrio	2	14	9	50	52	23	75
<b>Milan</b>	<b>7</b>	<b>440</b>	<b>101</b>	<b>1,165</b>	<b>1,283</b>	<b>430</b>	<b>1,713</b>
Bergamo	7	166	55	217	331	114	445
Brescia	21	180	43	265	364	146	510
Pavia	7	61	16	136	154	66	220
Cremona	7	50	10	82	108	40	148
Mantova	13	66	14	84	123	54	177
Lecco	2	55	11	74	102	39	141
Lodi	3	25	7	58	71	22	93
<b>Italy</b>	<b>990</b>	<b>5,036</b>	<b>1,832</b>	<b>14,546</b>	<b>16,117</b>	<b>6,287</b>	<b>22,404</b>

Source: Istat.

**Table 1.7.2 – Market of labour in the province of Milan, 2003/2004**

	Thousand units		Variation 2004/2003	
	2004	2003	Thousand units	%
<b>Employed (A)</b>	<b>1,713</b>	<b>1,650</b>	<b>+ 63</b>	<b>+ 13.8</b>
Males	980	959	+ 21	+ 2.2
Females	733	691	+ 42	+ 6.1
Dependent	1,283	1,269	+ 14	+ 1.1
Independent	430	381	+ 49	+ 12.9
Agriculture	7	11	- 4	- 36.4
Industry	541	560	- 19	- 3.4
Services	1,165	1,079	+ 86	+ 8.0
<b>Unemployed (B)</b>	<b>83</b>	<b>78</b>	<b>+ 5</b>	<b>+ 6.4</b>
Males	37	37	--	--

Females	47	42	+ 5	+ 11.9
<b>Labour force (A+B)</b>	<b>1,796</b>	<b>1,728</b>	<b>+ 68</b>	<b>+ 3.9</b>
Males	1,016	996	+ 20	+ 2.0
Females	780	732	+ 48	+ 6.6

Source: Province of Milan – Observatory on the labour market.

**Table 1.7.3 – Guaranteed wage fund (CIG, Cassa Integrazione Guadagni):**  
number of hours funded and number of worker involved in province of Milan, 2003 and 2004

	<b>Total</b>	<b>Ordinary CIG</b>	<b>Extraordinary CIG</b>	<b>Blue collars</b>	<b>White collars</b>
<b>No. of hours</b>					
2004	12,495,907	5,968,538	6,527,369	7,657,123	4,838,784
2003	9,727,673	5,675,905	4,051,768	6,175,163	3,552,510
Variations 2004/2003 (%)	+ 28.4	+ 5.1	+ 61.1	+ 24.0	+ 36.2
<b>No. of worker involved</b>					
2004	7,265	3,470	3,794	4,451	2,813
2003	5,655	3,299	2,355	3,590	2,065
Variations 2004/2003 (No.)	+ 1,610	+ 171	+ 1,439	+ 861	+ 808
Variations 2004/2003 (%)	+ 28.5	+ 5.2	+ 61.1	+ 24.0	+ 39.1

Source: Province of Milan – Observatory on the labour market.

In Italy there are functional subdivisions based on Local labour markets (*Sistemi Locali del Lavoro, S.L.L.*) that cover the whole national territory, but they hold no particular significance in the case of big cities and in particular for Milan, which is a far larger attractor than most others.

Local labour markets in Italy are 686 in 2001, they were 784 in 1991 and 955 in 1981. Such subdivisions, who hold no administrative role, are of particular significance in the definition of industrial districts (*distretti industriali*) which are important industrial areas located in what is called the Third Italy (North Eastern and Central regions like, for example, Veneto, Friuli Venezia Giulia, Emilia Romagna, Toscana, Marche).

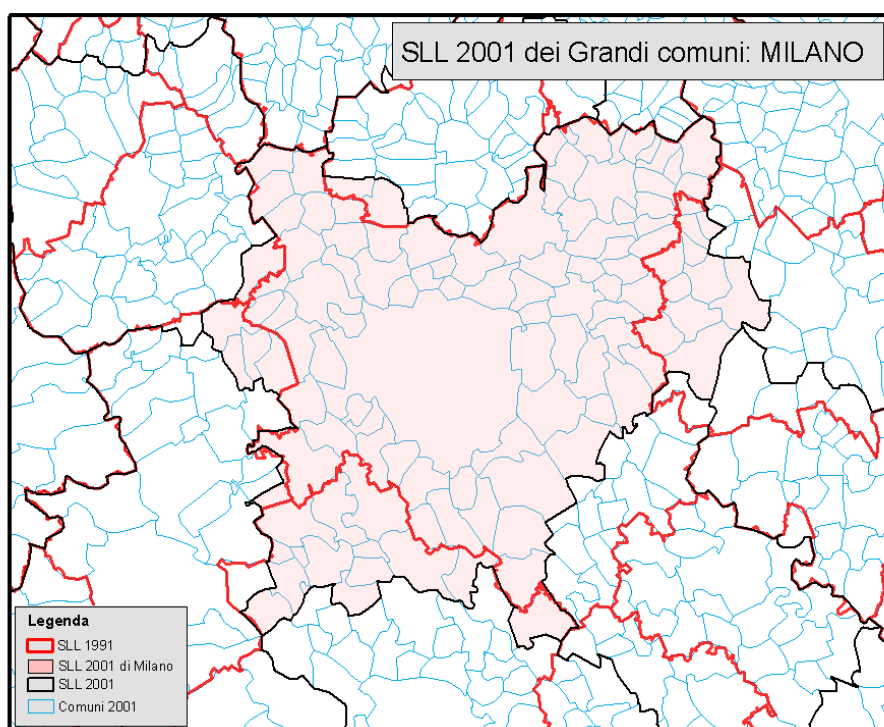
The S.L.L. of Milan has never had an administrative role, and it is not used in any local policy at provincial level. We attach here the latest version of the Milan S.L.L., published by the National Statistics Bureau (*ISTAT*) in July 2005, with some structural indicators calculated by the data of the national Census 2001.

Broadly speaking, we do not think this could be considered the most appropriate functional region of Milan, because it is calculated on daily commuting for work or study, which is to say on rather standard data. Such data do not take into account the area of flexible work, who holds paramount importance in a fragmented labour market like Milan, characterised by the presence of high level jobs.

**Table 1.7.4 - S.L.L. of Milan: Indicators 2001**

	<b>Number of municipality</b>	<b>Area (Kmq)</b>	<b>Resident population</b>	<b>Families</b>	<b>Households</b>	<b>Employees in local firms</b>	<b>Local firms</b>
Milano	115	1103,19	2.975.754	1.263.968	1.343.077	1.541.171	311.925
	Density of population	Members of the family (average)	Households x kmq	Residents x household	Local firms x 1000 residents	Employees x firm (average)	Employees x 1000 residents
Milano	2697,4	2,35	1.217,45	2,22	104,8	4,94	518

The methodology and procedures used for the calculation of S.L.L. is outlined in *ISTAT, I sistemi locali del lavoro 1991*, Roma, 1997.



### 1.7.2. Qualification of workers

Workers in the province of Milan are more and more employed in activities which require a high professional qualification. According to data referred to the 2001-2003 period (Table 1.7.5), the set of managerial, intellectual and technical professions represents in the province of Milan the relative majority of dependent workers (35.4 per cent of the total, against a 27.7 per cent national average), overcoming executive and commercial positions (31.6 per cent) and even more clearly operative positions constituted by skilled and unskilled workers (25.9 per cent).

It is also worth noting that the weight of highly skilled professions would probably be even higher if also independent workers were considered. Moreover, the weight of professions at high intellectual and specialized content is growing (7 per cent in 2003, against 5.9 per cent in 2001) and has overcome the weight of unskilled workers (5.7 per cent in 2003 against 8 per cent in 2001). The latter component of the labour market is sharply declining in the province of Milan.

Thus, Milan has at its disposal a wide and growing basin of highly skilled human resources, which today represent an essential function to favour the development of knowledge in the various working activities, the diffusion of innovation and creativity, the efficient management of organizational process, the reinforcement and qualification of relational networks, which often extend beyond local boundaries. All these represent a strategic resources and competencies for the growth of a complex and knowledge-based society.

**Table 1.7.5** – Evolution of professional structure in Italy and in province of Milan, 2001/2003 (*share on total of dependent workers*)

	31.12.2001		31.12.2002		31.12.2003	
	Milan	Italy	Milan	Italy	Milan	Italy
Managers and directors	100.0	1.2	2.5	1.3	2.2	1.3
Intellectual and scientific professions	5.9	4.4	6.4	4.3	7.1	5.7
Technical professions	27.5	19.2	26.9	19.2	26.1	20.7
Administrative professions	18.2	11.9	18.0	11.4	19.0	11.6
Sales, personal services	12.5	14.2	13.0	14.4	12.6	14.7
Skilled workers	13.7	23.5	14.2	23.2	15.2	22.2
Specialized production workers	12.2	16.2	12.0	16.4	12.2	15.3
Unskilled workers	8.0	9.3	7.1	9.7	5.7	8.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: elaborations Unioncamere on data RTFL, January 2002 – January 2004.

A main agent in the development process of the knowledge-based society is the firm, whose labour demand is increasingly oriented toward highly skilled human resources. The propensity of firms to acquire highly-skilled human capital can be in general terms, by the demand for graduated workers. In 2004 the share of graduated workers required by firms in the province of Milan reached 16.4 per cent of the total number of estimated engagements (Table 1.7.6), a share which nearly doubles the national average (8.4 per cent).

**Table 1.7.6** – Expected engagements of managers, technicians and highly-skilled white-collars in the province of Milan, 2003-2004

	Total engagements 2004		Total engagements 2003	
	Absolute values	per cent	Absolute values	per cent
<b>Total expected engagements</b>	<b>58,748</b>	<b>100.0</b>	<b>65,078</b>	<b>100.0</b>
Managers and directors	557	0.9	487	0.7
Intellectual, scientific and highly-skilled professions	5,316	9.1	6,093	9.4
Technical professions	12,841	21.8	13,166	20.2
<b>Total managers, technicians and highly-skilled white-collars</b>	<b>18,714</b>	<b>31.9</b>	<b>19,746</b>	<b>30.3</b>

Source: Sistema Informativo Excelsior 2003/2004, Unioncamere – Ministry of Labour.

An interesting way to represent the firms' demand for highly skilled human resources is possible by elaborating the demand of labour according to three different functional areas: "development of research activities", "development of networks" and "development of markets", which together form the set of professions at high organizational and research capital (Table 1.7.7).

**Table 1.7.7** – Professional requirements in the province of Milan, 2002-2004

	2002	2003	2004	03/02	04/03
<b>Italy</b>					
Professions for the development of research	14,682	10,566	13,405	-28.0	+26.9
Professions for the development of networks	22,969	19,475	26,943	-15.2	+38.3
Professions for the development of markets	17,117	16,455	20,131	-3.9	+22.3
Total professions at high knowledge and research capital	54,768	46,496	60,479	-15.1	+30.1
Total intellectual and technical professions	113,221	102,711	117,320	-9.3	+14.1
Total production workers	110,401	95,492	89,813	-13.5	-5.9
Total operative professions	566,912	563,822	551,325	-0.5	-2.2
<b>Province of Milan</b>					
Professions for the development of networks	3,153	2,929	3,925	-7.1	+34.0
Professions for the development of markets	4,078	3,931	4,079	-3.6	+3.8
Total professions at high knowledge and research capital	10,789	9,381	11,076	-13.1	+18.1
Total intellectual and technical professions	20,449	17,263	18,714	-15.6	+8.4

Total production workers	7,263	5,928	5,501	-18.4	-7.2
Total operative professions	45,637	47,815	40,034	+4.8	-16.3

Source: Sistema Informativo Excelsior 2003/2004, Unioncamere – Ministry of Labour.

In 2004 the number of estimated engagements for this set of dependent workers has remarkably grown (+18.1 per cent), inverting the negative trend emerged in 2003. A possible explanation is that the long phase of economic stagnation in the last years is inducing firms to focalize on the innovation of organizational processes, thus internalizing strategic human resources (even though, as seen before, SMEs prefer to turn to freelance workers). On the contrary, the demand for human capital in the area of production has sharply declined (-16.3 per cent).

Labour demand is stronger for the professions engaged in the development of research activities (R&D managers and technicians, electronic engineers, chemists and physicians, etc.: +22.3 per cent) and above all for the professions engaged in the development of networks (managers and technicians in the areas of administration, finance and purchasing: +34.0 per cent), while the demand for professions engaged in the development of markets (marketing, sales) is less dynamic (+3.8 per cent) and probably near to saturation.

The acquisition of human resources endowed with high knowledge and relational capital seems to constitute the specific modality with which the firms of Milan (and in general, Italian firms) innovate, rather than investments in formal knowledge (patents and R&D investments). Even if professional profiles engaged in the development of research activities are useful to access knowledge and technologies necessary to the development of process and product innovations, those engaged in the development of networks give the firm competences which are indispensable to improve the management of businesses and network relations.

The trend towards highly-skilled human capital is confirmed by the composition of new engagements of dependent employees by educational qualification (Table 1.7.8). In 2004 graduates represented about 1/6 on total engagements in the province of Milan (16.4 per cent, compared to 14.7 per cent in 2003), a share which nearly doubles national average. The demand for workers with upper secondary school certificate is also increasing and in 2004 it represented 37.9 per cent of total, compared with 34.5 per cent in 2003. On the contrary, workers with only compulsory education represented only 28.2 per cent of labour demand, compared with 36 per cent in 2003 and with the national average of 41 per cent in 2004.

**Table 1.7.8** – Professional requirements in the province of Milan, 2002-2004

	2004		2003	
	Absolute values	per cent	Absolute values	per cent
<b>Total engagements</b>	<b>58,748</b>	<b>100,0</b>	<b>65,078</b>	<b>100,0</b>
Degree certificate	9,638	16.4	9,553	14.7
Upper secondary school certificate	22,262	37.9	22,436	34.5
Professional qualification	10,281	17.5	9,664	14.8
Compulsory education	16,567	28.2	23,425	36.0

Source: Sistema Informativo Excelsior 2003/2004, Unioncamere – Ministry of Labour.

Demand for graduate workers is however increasingly turning towards freelance workers. According to a recent research carried on by Formaper (a structure of the Milan Chamber of Commerce engaged in professional training, in particular for SMEs), in 2003 more than 56 per cent of the total demand for graduated workers in the province of Milan (more than 22,000 employees) has been formed by freelance workers (nearly 12,600), while dependent workers with open-ended contracts were only 31.9 per cent of the total (Table 1.7.9).

The common opinion according to which SMEs would express a lower demand for graduated workers than larger firms has been reversed by Formaper's research. The study demonstrates that if freelance workers are considered, as well as dependent workers, more than half the demand for graduated workers (55 per cent) is generated by firms with less than 50 employees, while their share is 44 per cent if only dependent workers are considered (Table 1.7.10). In other words, smaller firms do demand for graduated workers, but unlike large forms the generally prefer to engage freelance rather than dependent "knowledge workers", thus economizing on fixed costs and maintaining their notorious flexibility.

**Table 1.7.9** – Demand for graduated workers in the province of Milan, 2003

Degree	Demand for graduated dependent workers			Demand for graduated freelance workers	Total demand
	Total	of which with open-ended contract			
		No.	per cent		
Political and social sciences	254	205	33.3	361	615
Jurisprudence	103	74	15.0	391	494
Literature, Arts, Humanities	427	239	9.9	1,985	2,412
Statistics	200	99	28.4	149	349
Computer science	957	804	33.5	1,441	2,398
Economics, Business Engineering	3,652	2,560	44.9	2,054	5,706
Civil Engineering / Architecture	225	149	6.4	2,114	2,339
Technical engineering	1,649	1,270	41.5	1,411	3,060
Mathematics, physics	48	41	23.4	127	175
Medicine	744	604	27.8	1,432	2,176
Chemistry, pharmacy	478	392	69.3	88	566
Environmental sciences	39	13	9.5	98	137
Biology, biotechnology	259	213	39.2	284	543
Agricultural sciences	3	3	37.5	5	8
Industrial chemistry	302	261	60.1	132	434
<b>Total</b>	<b>9,340</b>	<b>6,927</b>	<b>32.4</b>	<b>12,072</b>	<b>21,412</b>
Not specified	298	168	20.1	536	834
<b>Total</b>	<b>9,638</b>	<b>7,095</b>	<b>31.9</b>	<b>12,608</b>	<b>22,246</b>

Source: elaborations of Formaper on data Specula-Excelsior.

**Table 1.7.10** – Demand for graduated workers in the province of Milan by firm size, 2003

Firm size	Demand for graduated dependent workers			Demand for graduated freelance workers	Total demand
	Total	of which with open-ended contract			
		No.	per cent		
1 - 9 employees	866	689	12.4	4,674	5,540
10 - 49 employees	1,249	996	14.9	5,420	6,669
50 – 249 employees	2,075	1,522	46.7	1,183	3,258
> = 250 employees	5,448	3,888	57.4	1,331	6,779
<b>Total</b>	<b>9,638</b>	<b>7,095</b>	<b>31.9</b>	<b>12,608</b>	<b>22,246</b>

Source: elaborations of Formaper on data Specula-Excelsior.

**Table 1.7.11** – Demand for dependent workers and freelance workers by firm size and industry in the province of Milan, 2003

Industries	Demand for dependent workers		Demand for freelance workers		Total demand
	< 50 employees	≥ 50 employees	< 50 employees	≥ 50 employees	
Food products and other manufacturing industries	25	73	11	7	116
Textiles, clothing, shoes and leather products	0	22	30	7	59
Wood products and furniture	8	12	18	3	41
Paper, paper products, publishing and print	104	148	214	191	657
Other mechanical industries	60	279	19	29	387
Electrical and electronical machinery and products	42	428	58	94	622

Medical, precision and optical instruments	37	36	37	4	114
Energy, mining, basic metals	24	223	31	12	290
Chemical and pharmaceutical products	78	619	20	113	830
Rubber and plastic products	19	39	31	13	102
Construction	174	63	303	12	552
Trade	78	651	180	42	951
Hotel, restaurants and tourism	0	25	57	102	184
Information and communication services	331	1,109	1,752	153	3,345
Other advanced services	505	1,405	3,310	370	5,590
Transports and postal services	12	148	38	63	261
Financial services and insurances	274	1,174	207	68	1,723
Operational services	50	91	244	24	409
Health and education	270	821	1,871	914	3,876
Recreational and personal services	15	155	267	288	725
Professional offices	9	2	1,396	5	1,412
<b>Total</b>	<b>2,115</b>	<b>7,523</b>	<b>10,094</b>	<b>2,514</b>	<b>22,246</b>

Source: elaborations Formaper on data Specula-Excelsior.

### 1.7.3. Professional training

In 2003 companies in the province of Milan spent nearly 226 million euro in professional training, mostly for their dependent employees (Table 1.7.12). Nearly 270,000 workers (24 per cent of total) in the province of Milan and 495,000 in Lombardy (20.6 per cent of total) attended at professional training courses. Per capita cost of formation was 830 euro in the province of Milan (845 in Lombardy). The contribution of public funding was relatively poor in the province of Milan and sharply decreasing in comparison to 2002. In the province of Milan, public contribution to training activities fell from 32 to only 14 million euro, while in the entire region the value decreased from 46 to 40 million euro.

Medium and large firms were responsible for the highest share of total expenses in training activities: nearly 42 per cent of their workers attended at professional training courses in 2003, with an average per capita cost of 1,109 euro (Table 1.7.13).

**Table 1.7.12** – Number of people trained in Lombardy and province of Milan, 2003

	Total number of people trained	Dependent workers trained	Total costs of training (thousands €)	Private funds (thousands €)	Public funds (thousands €)	Dependent workers at 31.12.2003
Lombardy	495,515	476,596	418,578	377,607	40,971	2,401,635
Milan	270,495	264,665	225,986	211,374	14,612	1,154,594

Source: Sistema Informativo Excelsior 2003/2004, Unioncamere – Ministry of Labour.

**Table 1.7.13** – Number of people trained and cost of training activities in the province of Milan, by sector of activities and firm size, 2003

	Total No. of people trained	Dependent workers trained	Total costs of training (th. €)	Private funds (th. €)	Private funds (th. €)	Dependent workers at 31.12.2003
<b>Total</b>	<b>270,495</b>	<b>264,665</b>	<b>225,986</b>	<b>211,374</b>	<b>14,612</b>	<b>1,154,594</b>
Industrial activities	79,899	79,261	48,341	45,742	2,598	400,020
Constructions	6,949	6,393	3,082	2,795	287	56,237
Wholesale and retail trade	32,829	31,537	12,437	10,688	1,750	189,137
Hotels, restaurants and tourism	8,371	8,047	20,336	20,041	295	49,430
ICT, R&D and professional activities	53,774	52,073	35,550	34,176	1,374	164,231
Transports, storage and postal services	13,501	13,436	13,506	13,347	158	95,132

Banks, insurance and financial services	49,127	48,957	30,702	22,972	7,729	81,236
Health and instruction	11,971	11,780	41,188	40,997	191	30,240
Other public, social and personal services	14,074	13,181	20,846	20,617	229	88,931
1 to 9 employees	24,922	19,363	6,374	5,933	441	229,424
10 to 49 employees	27,437	27,197	13,739	13,112	626	267,195
50 to 249 employees	54,605	54,574	24,524	22,157	2,367	267,824
250 or more employees	163,531	163,531	181,349	170,172	11,177	390,151

Source: Sistema Informativo Excelsior 2003/2004, Unioncamere – Ministry of Labour.

#### 1.7.4. Wages

Wage negotiations in Italy have two levels. The first level is given by national collective contracts, the second by company bargaining. As a consequence, differences in salary levels between regions and provinces are quite low and mainly linked to differences in the degree of qualification of labour force.

Data provided by INAIL (the National Institute for Insurance Against Occupational Accidents) show that wages and salaries are indeed higher than in the other Italian provinces. Annual pro capita wages in Lombardy are about 9 per cent higher than national average, while for the province of Milan the difference is nearly 17 per cent (Table 1.7.14). Differences remained quite stable over more recent years.

**Table 1.7.14** – Annual per capita wages and salaries insured by workers registered with INAIL, 1995-2002 (thousand EUR)

	1995	1996	1997	1998	1999	2000	2001	2002
Milan	15,128	15,640	16,375	16,784	16,831	17,130	16,962	17,751
Lombardy	14,018	14,500	15,085	15,535	15,660	15,906	15,830	16,642
Italy	12,895	13,367	13,857	14,469	14,461	14,700	14,594	15,183
Milan (Italy = 100)	117,3	117,0	118,2	116,0	116,4	116,5	116,2	116,9
Lombardy (Italy = 100)	108,7	108,5	108,9	107,4	108,3	108,2	108,5	109,6

Note: Data relating to proprietors, family members and partners of handicraft enterprises, to apprentices and to members of cooperatives of fishermen and porters are not comprised.

Source: INAIL (National Institute for Insurance against Occupational Accidents).

No significant differences emerge even considering the various industries (see Table 1.7.15). Wages and salary in the province of Milan are regularly higher than national average in all economic activities, except agriculture (which is however marginal in the province). Employees in handicraft firms are disadvantaged as well, since their wages and salaries are below the national average (Table 1.7.16).

**Table 1.7.15** - Average annual per capita wages and salaries insured by workers registered with INAIL, by economic activity, 2002 (thousand EUR)

	Milan		Lombardy		Italy
	Th. EUR	Italy=100	Th. EUR	Italy=100	
Agriculture	10,154	69,9	10,068	69,3	14,523
Fisheries	-	-	-	-	13,367
Mining	19,303	119,5	16,995	105,2	16,158
Manufacturing industries	18,383	115,7	17,558	110,5	15,894
Food products, beverages and tobacco	18,288	130,5	17,002	121,3	14,016
Textiles, textile products and clothing	15,926	113,7	15,857	113,2	14,006
Leather and leather products	15,016	109,8	14,522	106,2	13,674
Wood and wood products (excluded furniture)	11,054	111,5	11,118	112,2	9,912
Pulp, paper and paper products, publishing and print	18,896	111,9	18,309	108,5	16,880
Coke, refined petroleum products and nuclear fuel	19,972	111,1	19,553	108,8	17,971



Chemical products, pharmaceuticals and fibres	20,110	107,5	19,801	105,9	18,699
Rubber and plastic products	19,279	107,5	18,702	104,3	17,928
Non metallic mineral products	17,707	110,1	17,213	107,0	16,087
Basic metals and fabricated metal products	17,388	110,0	17,177	108,7	15,803
Machinery and equipment	19,249	107,7	18,771	105,0	17,874
Electrical equipment and instruments	19,067	114,4	18,344	110,0	16,673
Transport equipment	19,908	105,7	19,549	103,8	18,839
Other manufacturing industries and recycling	13,536	104,8	13,425	103,9	12,917
Energy, gas and water supply	21,180	112,0	20,529	108,6	18,909
Construction	11,214	116,5	9,924	103,1	9,624
Trade	17,971	122,8	16,675	113,9	14,641
Trade and repair of motor vehicles and motorcycles	14,117	132,1	12,576	117,7	10,686
Wholesale trade (excluded motor vehicles)	18,713	113,4	17,993	109,0	16,509
Retail trade (excluded motor vehicles)	17,842	122,3	16,418	112,5	14,590
Hotels, bar and restaurants	17,370	116,1	16,053	107,3	14,959
Transports, storage and communication	16,760	111,3	15,583	103,5	15,062
Financial intermediation	19,547	109,3	19,211	107,4	17,888
Real estate, rent and business activities	17,984	112,9	17,231	108,1	15,936
Public administration	19,540	111,8	18,659	106,7	17,480
Education	18,923	112,7	18,135	108,0	16,789
Health	19,291	111,4	18,531	107,0	17,316
Other community, social and personal services	14,694	115,7	13,298	104,7	12,699
Unspecified activities	8,971	136,2	7,304	110,9	6,587
<b>TOTAL</b>	<b>17,751</b>	<b>116,9</b>	<b>16,642</b>	<b>109,6</b>	<b>15,183</b>

Note: Data relating to proprietors, family members and partners of handicraft enterprises, to apprentices and to members of cooperatives of fishermen and porters are not comprised.

Source: INAIL (National Institute for Insurance against Occupational Accidents).

**Table 1.7.16** - Annual per capita wages and salaries insured by handicraft and non-handicraft enterprises, 2002 (thousand EUR)

	Handicraft enterprises	Non-handicraft enterprises	Total
Milan	5,310	19,089	17,751
Lombardy	6,086	18,581	16,642
Italy	5,402	17,226	15,183
Milan (Italy = 100)	98,3	110,8	116,9
Lombardy (Italy = 100)	112,7	107,9	109,6

Note: Data relating to proprietors, family members and partners of handicraft enterprises, to apprentices and to members of cooperatives of fishermen and porters are not comprised.

Source: INAIL (National Institute for Insurance against Occupational Accidents).

Wage differences between Milan and the other provinces seem not sufficient to compensate the higher costs of living in Milan.

White collars, newly and recent university graduates are suffering more than the others, as testified by a research committed by the most important Italian newspaper, *Corriere della Sera*, to a Bergamo-based consulting firm, Od&M. The research focuses on working conditions and wages of Italians. In 2004 nearly 850,000 people, 250,000 of which from the province of Milan, answered a questionnaire on the web page ([www.odmconsulting.com](http://www.odmconsulting.com)) of the consulting firm. Even though the sample from the province of Milan was not built with scientific methods, the high number of answers make that enquiry one of the very few information sources on real wages.

According to the research, in 2004 the salary of white collars working in Milan rose only by 1.3 per cent, an increase which did not cover inflation rate (in 2004 Istat estimated 1.7 per cent inflation rate in Milan).

Between 2000 and 2004 white collars lost 10 per cent of their purchasing power. Moreover, in 2004 the increase of the salary of white collar in Milan was lower than national average (1.9 per cent). Things were better for blue collars and top manager, whose salaries rose by 3.3 per cent in 2004, and particularly for middle managers (+5 per cent).

The average gross salary of a newly university graduate in 2002 in Milan was 23,381 euro a year; in 2004 the same salary was only 23,159 euro. After four years of work, in 2002 the average gross salary of graduated who had entered the labour market in 1998 was 28,286 euro a year; in 2004, the average gross salary of graduated who had entered the labour market in 2000 was only 26,370 euro. Moreover, it is increasingly difficult for them to find an open-ended contract, while it is not a problem to gain a part-time and flexibles contract.

## 1.8. HUMAN CAPITAL

### 1.8.1. Literacy rate and educational levels of the population

The educational level of the Milan province is higher than the national average, but still significantly lower than that of other advanced European areas. Nearly 70.7 per cent of the population aged 6+ in Milan province in 2001 had finished secondary school (at least 8 years of school), compared with 66.5 percent in Lombardy and 63.5 percent in Italy; 39.8 per cent had finished upper secondary school (12 or 13 school years), compared with 34.7 percent in Lombardy and 33.4 percent in Italy; 10.1 percent had a tertiary degree certificate (7.9 percent in Lombardy and 7.5 percent in Italy). A certain number of illiterate still remains only among oldest people, particularly those immigrated from the South of Italy in the '50s and '60s (Table 1.8.1).

**Table 1.8.1 - Population aged 6+ by education level, 2001 (%)**

	Milan (province)	Lombardy	North- Western Italy	North- Eastern Italy	Central Italy	Southern Italy and Islands	Italy
Graduate or post graduate degree certificate	8.8	6.7	6.5	6.1	7.8	5.9	6.5
Other tertiary degree certificate	1.3	1.2	1.1	1.1	1.2	0.8	1.0
Upper secondary school certificate	29.6	26.9	26.5	26.5	28.4	23.7	25.9
Secondary school or professional certificate	30.9	31.8	31.7	30.3	27.9	30.1	30.1
Primary school certificate	22.3	26.3	26.8	27.2	24.6	23.9	25.4
Literates without school certificate	6.5	6.7	6.8	8.2	9.2	12.7	9.7
Illiterates	0.6	0.5	0.6	0.6	0.9	2.9	1.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Istat.

**Table 1.8.2 – Population aged 6+ by education level and gender, 2001**

	Total population aged 6+	Graduate or post graduate degree certificate	Other tertiary degree certificate	Upper secondary school certificate	Secondary school or professional certificate	Primary school certificate	Literates without school certificate	Illiterates	Total
<b>Milan (province)</b>									
Total	3,511,809	8.8	1.3	29.6	30.9	22.3	6.5	0.6	100.0
Women	1,829,725	7.9	1.7	28.7	28.8	25.3	6.9	0.7	100.0
Men	1,682,084	9.8	0.9	30.7	33.2	19.0	6.0	0.4	100.0
<b>Lombardy</b>									
Total	8,544,146	6.7	1.2	26.9	31.8	26.3	6.7	0.5	100.0
Women	4,422,076	6.1	1.5	26.2	28.9	29.6	7.1	0.6	100.0
Men	4,122,070	7.3	0.8	27.6	35.0	22.7	6.3	0.4	100.0
<b>North-Western Italy</b>									
Total	14,173,065	6.5	1.1	26.5	31.7	26.8	6.8	0.6	100.0
Women	7,359,601	6.0	1.4	25.7	28.8	30.0	7.4	0.7	100.0
Men	6,813,464	7.1	0.8	27.3	34.8	23.3	6.2	0.5	100.0
<b>North-Eastern Italy</b>									
Total	10,073,126	6.1	1.1	26.5	30.3	27.2	8.2	0.6	100.0
Women	5,202,575	5.7	1.4	25.5	27.1	30.2	9.4	0.7	100.0
Men	4,870,551	6.5	0.8	27.6	33.6	24.0	6.9	0.4	100.0
<b>Central Italy</b>									
Total	10,357,269	7.8	1.2	28.4	27.9	24.6	9.2	0.9	100.0
Women	5,394,915	7.4	1.6	27.9	24.6	26.6	10.7	1.2	100.0
Men	4,962,354	8.2	0.9	29.0	31.5	22.3	7.5	0.6	100.0
<b>Southern Italy and Islands</b>									
Total	19,251,502	5.9	0.8	23.7	30.1	23.9	12.7	2.9	100.0

Women	9,923,467	5.8	1.0	23.2	26.6	25.6	14.2	3.6	100.0
Men	9,328,035	6.0	0.6	24.1	33.8	22.1	11.2	2.1	100.0
<b>ITALY</b>									
Total	53,854,962	6.5	1.0	25.9	30.1	25.4	9.7	1.5	100.0
Men	25,974,404	6.1	1.3	25.2	26.9	27.8	10.8	1.8	100.0
Women	27,880,558	6.8	0.8	26.6	33.6	22.8	8.4	1.1	100.0

Source: Ministry of Education, University and Research.

The educational level of population increased significantly in the region during the last decades, as shown by Table 1.8.3.

**Table 1.8.3** – Province of Milan; population aged 6+ by education level, 1961-2001

	1961	1971	1981	1991	2001
Graduate of post graduate degree certificate	59,454	87,549	135,080	194,760	309,212
- % on total population	2.1	2.5	3.6	5.2	8.8
- % women / total	23.8	29.3	35.2	39.8	46.7
Upper secondary school certificate	182,975	302,590	536 627	874,683	1,087,976
- % on total population	6.3	8.6	14.2	23.4	30.9
- % women / total	50.5	50.3	50.0	49.1	51.2
Secondary school certificate	513,796	733,345	1,116 786	1,263,895	1,084,984
- % on total population	17.7	20.8	29.6	33.9	30.9
- % women / total	50.5	50.3	50.0	49.1	48.6
Primary school certificate	1,817,260	1,617,513	1,495 535	1,097,588	782,460
- % on total population	62.8	45.9	39.7	29.4	22.3
- % women / total	54.1	53.1	55.8	57.8	59.2
No school certificate	322,466	783,668	483 801	301,325	227,710
- % on total population	11.1	22.3	12.9	8.1	6.5
- % women / total	53.6	56.4	55.4	56.6	55.5

Source: Istat.

### 1.8.2. Universities in the Milan province and in Lombardy

Lombardy has 12 universities, 7 of which are located in Milan. No other region in Italy can offer such a variety of education as Lombardy. The state-run part of higher education in Lombardy comprises 7 universities, 3 of which in Milan. There are also 5 private universities, 2 of which in Milan. The university in Lombardy have nearly 245,000 students (13.6% of the national total), 187,000 of which in Milan (10.4% of the national total). More than half of the students of Milan universities come from abroad.

Some of the institutes are highly specialized, while other offers a large variety of courses programmes and research.

The largest university in Lombardy is the state-run “Università degli Studi di Milano”, with 63,000 full-time students; the Politecnico di Milano has just less than 40,000 students, the “Università Cattolica del Sacro Cuore” nearly 36,000. The smallest are two private universities, the “Università Carlo Cattaneo” in Castellanza with 2,100 students and the Università Vita-Salute “San Raffaele” (private) in Milan, with nearly 1,200 students.

The Politecnico di Milano (state-run) is one of the most important engineering universities in Europe,

while the well-known Bocconi University (private) is specialized in economics and business administration programmes.

**Table 1.8.4** – Students enrolled in University courses in Lombardy, by University, 2003/2004

	TOTAL		of whom enrolled in first year		of whom enrolled in first year for first time	
	Total	of whom Females	Total	of whom Females	Total	of whom Females
Milan - State University	62,855	56.5%	15,229	56.8%	13,159	57.5%
Milan-Bicocca - State University	27,481	62.0%	7,328	61.0%	5,677	60.8%
Milan - Polytechnic	39,268	26.7%	9,793	29.8%	7,046	28.2%
Milan - Catholic University "Sacro Cuore"	36,812	64.9%	8,069	66.7%	7,359	66.3%
Milan - Commercial University "L. Bocconi"	11,896	57.0%	2,566	55.5%	2,527	55.3%
Milan - IULM	7,600	72.2%	1,661	67.9%	1,406	68.2%
Milan - University Life-Health San Raffaele	1,290	66.4%	382	69.6%	358	69.8%
<b>Province of Milan</b>	<b>187,202</b>	<b>53.4%</b>	<b>129,428</b>	<b>55.2%</b>	<b>45,028</b>	<b>53.8%</b>
Bergamo - State University	11,764	59.6%	3,603	57.2%	3,219	57.8%
Brescia - State University	12,854	45.7%	3,278	46.0%	2,908	47.1%
Pavia - State University	22,390	55.2%	5,604	54.5%	4,558	54.4%
Castellanza - "Carlo Cattaneo" University	2,118	30.7%	443	33.6%	402	34.3%
Varese - University of Insubria	8,149	53.8%	2,540	51.1%	2,230	51.7%
<b>Lombardy</b>	<b>244,477</b>	<b>53.3%</b>	<b>172,344</b>	<b>54.9%</b>	<b>60,496</b>	<b>53.4%</b>
<b>Italy</b>	<b>1,803,024</b>	<b>55.7%</b>	<b>405,718</b>	<b>54.3%</b>	<b>353,119</b>	<b>54.8%</b>

Source: Ministry of Education, University and Research.

**Table 1.8.5** – Students enrolled in University courses in Lombardy, by length of degree courses, 2003/2004

	Three-years courses			Four- or five-years courses		
	Total	Women	Men	Total	Women	Men
Milan - State University	35,776	19,953	15,823	27,079	15,557	11,522
Milan-Bicocca - State University	18,409	10,871	7,538	9,072	6,161	2,911
Milan - Polytechnic	24,211	6,259	17,952	15,057	4,245	10,812
Milan - Catholic University "Sacro Cuore"	22,092	14,379	7,713	14,720	9,494	5,226
Milan - Commercial University "L. Bocconi"	7,542	4,099	3,443	4,354	2,681	1,673
Milan - IULM	5,388	3,807	1,581	2,212	1,678	534
Milan - University Life-Health San Raffaele	798	552	246	492	305	187
<b>Province of Milan</b>	<b>114,216</b>	<b>59,920</b>	<b>54,296</b>	<b>72,986</b>	<b>40,121</b>	<b>32,865</b>
Bergamo - State University	9,503	5,533	3,970	2,261	1,473	788
Brescia - State University	7,605	3,433	4,172	5,249	2,435	2,814
Pavia - State University	12,632	6,879	4,158	9,758	5,472	5,881
Castellanza - "Carlo Cattaneo" University	1,282	379	903	836	272	564
Varese - University of Insubria	5,395	2,841	2,554	2,754	1,542	1,212
<b>Lombardy</b>	<b>131,233</b>	<b>68,862</b>	<b>62,371</b>	<b>113,244</b>	<b>61,438</b>	<b>51,806</b>
<b>Italy</b>	<b>1,005,306</b>	<b>538,738</b>	<b>466,568</b>	<b>797,718</b>	<b>465,169</b>	<b>332,549</b>

Source: Ministry of Education, University and Research.

**Table 1.8.6** – Students enrolled in University courses in Lombardy, by length of degree courses, 2003/2004

	Total	Humanistic and social sciences	Medicine	Natural sciences	Technical
Milan - State University	35,510	17,503	5,406	6,404	6,197
Milan-Bicocca - State University	17,032	11,683	1,430	1,611	2,308
Milan - Polytechnic	10,504	0	0	0	10,504
Milan - Catholic University "Sacro Cuore"	23,873	18,034	2,549	378	2,912
Milan - Commercial University "L. Bocconi"	6,780	6,345	0	0	435
Milan - IULM	5,485	5,242	0	0	243

Milan - University Life-Health San Raffaele	857	292	,498	67	0
<b>Province of Milan</b>	<b>100,041</b>	<b>59,099</b>	<b>9,883</b>	<b>8,460</b>	<b>22,599</b>
Bergamo - State University	7006	6,422	0	0	584
Brescia - State University	5,868	1,403	2,101	64	2,300
Pavia - State University	12,351	5,875	2,951	1,155	2,370
Castellanza - "Carlo Cattaneo" University	651	369	0	0	282
Varese - University of Insubria	4,383	1,195	1,361	,583	1,244
<b>Lombardy</b>	<b>130,300</b>	<b>74,363</b>	<b>16,296</b>	<b>10,262</b>	<b>29,379</b>
<b>Italy</b>	<b>1003,907</b>	<b>576,471</b>	<b>109,688</b>	<b>80,677</b>	<b>237,071</b>

Source: Ministry of Education, University and Research.

**Table 1.8.7 – Students enrolled in University courses in Lombardy, by province of the faculty, 2003/2004**

	TOTAL		of whom enrolled in first year		of whom enrolled in first year for first time	
	Total	of whom Females	Total	of whom Females	Total	of whom Females
<b>Milano</b>	<b>180,586</b>	<b>53.4%</b>	<b>124,062</b>	<b>55.1%</b>	<b>43,385</b>	<b>53.7%</b>
Bergamo	11,764	59.6%	9,033	59.1%	3,603	57.2%
Brescia	13,081	45.6%	9,981	46.9%	3,346	45.9%
Como	2,769	51.6%	1,686	51.8%	662	51.2%
Cremona	529	51.2%	342	52.0%	119	54.6%
Pavia	21,861	55.3%	15,679	57.2%	5,485	54.5%
Varese	7,498	48.1%	6,378	49.9%	2,321	47.7%
<b>Lombardy</b>	<b>238,088</b>	<b>53.2%</b>	<b>167,161</b>	<b>54.8%</b>	<b>58,921</b>	<b>53.3%</b>
<b>Italy</b>	<b>1.803.024</b>	<b>55,7%</b>	<b>405.718</b>	<b>54,3%</b>	<b>353.119</b>	<b>54,8%</b>

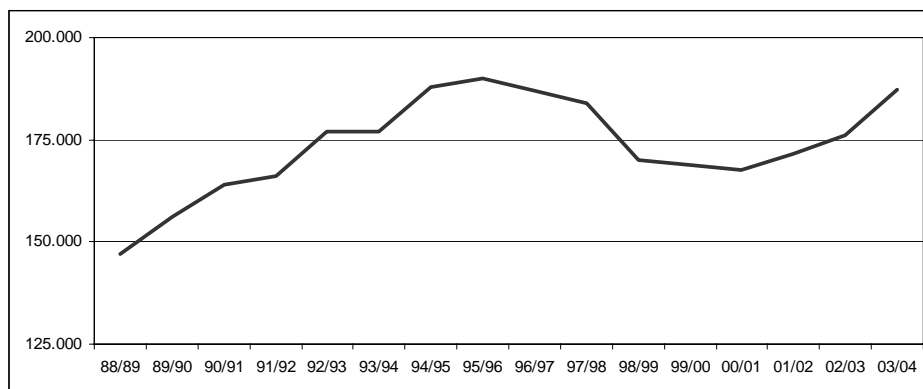
Source: Ministry of Education, University and Research.

**Table 1.8.8 – Students graduated/awarded a University diploma by University and subject areas, 2003/2004**

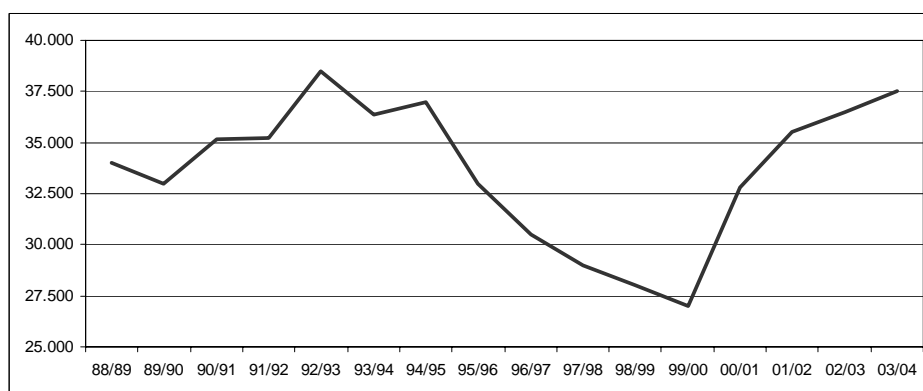
	Total	Humanistic and social sciences	Medicine	Natural sciences	Technical
Milan - State University	7,096	2,533	1,173	1,704	1,686
Milan-Bicocca - State University	2,554	1,115	296	400	743
Milan - Polytechnic	8,355	0	0	0	8,355
Milan - Catholic University "Sacro Cuore"	6,482	4,729	880	189	684
Milan - Commercial University "L. Bocconi"	2,468	2,401	0	0	67
Milan - IULM	1,674	1,641	0	0	33
Milan - University Life-Health San Raffaele	153	28	125	0	0
<b>Province of Milan</b>	<b>28,782</b>	<b>12,447</b>	<b>2,474</b>	<b>2,293</b>	<b>11,568</b>
Bergamo - State University	1,176	891	0	0	285
Brescia - State University	1,843	616	518	0	709
Pavia - State University	446	302	0	0	144
Castellanza - "Carlo Cattaneo" University	978	221	282	193	282
Varese - University of Insubria	4,110	1,622	836	391	1,261
<b>Lombardy</b>	<b>37,335</b>	<b>16099</b>	<b>4,110</b>	<b>2,877</b>	<b>14,249</b>
<b>Italy</b>	<b>233,501</b>	<b>110,346</b>	<b>30,447</b>	<b>19,796</b>	<b>72,912</b>

Source: Ministry of Education, University and Research.

The number of students enrolled at Milan Universities reached its maximum value in 1995/96 and then decreased, due to demographic reasons (Graph 1.8.1). The end of the “baby boom effect”, related to the peak of births in the sixties and the early seventies, caused a decrease in the number of the new enrolments beginning from 1993 (Graph 1.8.2). In the first years of this decade the number of students enrolled started growing again, as a consequence of the reform of the university system and the introduction of two degree levels (a first three-years level is followed by a second two-years level) instead of the previous model, based on a unique level of four- or five-years courses.

**Graph 1.8.1 – Total number of student enrolled at Milan Universities, 1988-2004**

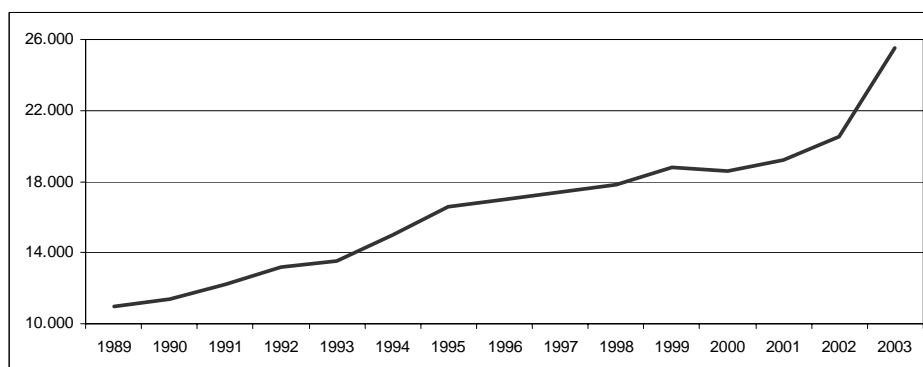
Source: Megliomilano and Ministry of Education, University and Research.

**Graph 1.8.2 – Total number of student enrolled for the first time in the first year at the six largest Universities in Milan, 1988-2004**

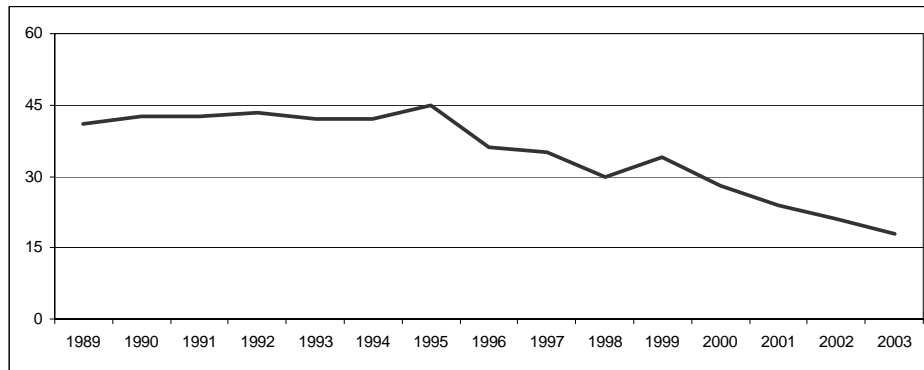
Source: Megliomilano and Ministry of Education, University and Research.

On the contrary, in the last 15 years the number of students graduated in Milan Universities has continued growing with no interruption (Graph 1.8.3).

A favourable trend is illustrated by Graph 1.8.4, which demonstrates that the number of university teachers per student has noticeably reduced over time.

**Graph 1.8.3 – Total number of student graduated in Milan Universities, 1988-2003**

Source: Megliomilano and Ministry of Education, University and Research.

**Graph 1.8.4 – Average ratio students/teacher in Milan Universities, 1988-2003**

Source: Megliomilano and Ministry of Education, University and Research.

### 1.8.3. Business schools and management education

SDA (Bocconi University) and MIP (Polytechnic of Milan) are well-known Business Schools based in Milan, which compete at the highest levels in the internationally very competitive market of MBA programmes. Beyond them, many other private and public institution contribute to a wide and diversified offer in the field of management education.

Out of a total of 28 Master programmes accredited as of May, 2005 by Asfor,<sup>3</sup> 8 Master programmes are held in Milan by 5 different institutions:

- MBA - Master of Business Administration (held by SDA Bocconi);
- MIEM - Master in International Economy and Management (SDA Bocconi);
- Master in Small Enterprises (SDA Bocconi);
- MBA - Master of Business Administration (MIP Politecnico di Milan);
- EMBA - Executive Master of Business Administration (MIP Politecnico di Milan);
- Master in Communication and Marketing (Publitalia '80);
- Master in Banking Management (Euros Financial Competence).

<sup>3</sup> ASFOR is the Italian Association for Management Education Development and is a member of EQUAL, the international association of quality assessment and accreditation agencies in the field of European management education launched and hosted by the Brussels-based European Foundation for Management Development (EFMD). ASFOR was established in 1971 to foster the development of a continuous management education system in Italy. Today it has more than 60 member institutions, all actively operating in the field of management training and/or supporting its development.



## 1.9. SOCIAL CAPITAL AND COMMUNITY LIFE

### 1.9.1. Social Capital Dynamics

A partial picture, based on the available data, suggests that the social capital in the Province of Milan is quite rich and that the rising “third sector” provides a fertile ground for further development.

To assess social capital dynamics in the province, we consider a range of indicators belonging to different dimensions:

- political engagement;
- participation to community life;
- change in family structure;
- trust;
- crime rates.

Some indicators, such as voting or participation in local associations, relate directly to social capital, others are proxy or indirect measures of the issue.

Those interested in social capital normally look to the density of social networks that people are involved in, the extent to which they are engaged with others in social activities and their membership of associations.

However social capital can be analysed also through indirect measures, such as crime rates, mutual trust and family structure: all these variables could be negative outcome or benefits associated with social capital.

#### *1.9.1.1 Political Engagement*

The available data show a good level of involvement in political issues: the turn-out varies depending on the different types of elections.

In national balloting the turn-out is higher than local elections, even if the voters in Lombardia region decreased by 3% in the last (2001) national round.

In the local (i.e. regional and provincial) elections, the Province of Milan point out a lower participation than other provinces, 73,3% as against 76% in regional average.

#### *1.9.1.2 Participation To Community Life*

A positive and significant trend refers to social cohesion and specifically to the social networks that support an efficient and cohesive society.

The social economy and the third sector, measured by the numbers of no profit organizations (associations, recognized or not, foundations, NGO's, voluntary groups, cooperatives, Onlus, political parties, trade unions, religious bodies), are really increasing, with a positive impact in terms of employment.

In the last decade (1991-2001), the number of no profit organizations increased by 300% in the Province of Milan; this positive trend was not limited to Milan, however.

The number of the officers who permanently work in these organizations increased by about 28,000 units (see Table 1.9.2).

**Table 1.9.1 - Voter turn-out in Elections. National, Regional**

	Provincial 2004	Regional council 2000	National chamber 2001	National chamber 1996
Varese		74,0		
Como		75,7		
Sondrio	72,0	69,3		
Milano	73,3	73,3		
Bergamo	78,4	79,1		
Brescia	80,8	78,3		
Pavia		77,3		
Cremona	80,5	79,6		
Mantova		77,4		
Lecco	78,5	75,9		
Lodi	80,7	78,4		
III Lombardia 1			85,9	88,7
IV Lombardia 2			86,8	89,7
V Lombardia 3			87,1	90,2
<b>Lombardia</b>	<b>76,0</b>	<b>75,5</b>		
<b>Italia</b>	<b>75,3</b>		<b>81,5</b>	<b>82,9</b>

Source: Istat.

In terms of active membership and voluntary activity, the Table 1.9.3 shows the percentage of population (16-84 years old) who works as volunteers in no profit organizations.

The Province of Milan is the second within the region for total numbers of volunteers, but the situation of the area is rather good compared to national and regional average.

With regard to the range and quality of associational life, the data don't show that larger cities offer greater opportunities; regional differences are relatively small and activity levels are actually similar in all the provinces. The only difference concerns the cultural and sport associations that are much stronger in smaller areas.

In the province of Milan, the political activity is prevailing, but residents are under represented in environmental protection associations. On the whole, the choice of association between volunteers of the Milan area and the rest of the country is quite similar.

**Table 1.9.2 - No profit organizations and members (1991-2001). Italy, Lombardia region, Provinces of Lombardia**

	Organizations		Officers	
	1991	2001	1991	2001
Varese	1,076	2,999	3,123	6,953
Como	770	2,178	3,955	6,976
Lecco	476	1,331	992	4,130
Sondrio	202	916	501	1,616
<b>Milano</b>	<b>2,703</b>	<b>10,977</b>	<b>23,652</b>	<b>51,792</b>
Bergamo	888	4,116	4,318	8,036
Brescia	1,278	4,876	3,726	10,369
Pavia	406	1,946	1,268	6,384
Lodi	202	801	469	942
Cremona	480	1,525	1,065	2,945
Mantova	472	1,828	1,228	3,113
<b>Lombardia</b>	<b>8,953</b>	<b>33,493</b>	<b>44,297</b>	<b>103,256</b>
<b>Italia</b>	<b>61,376</b>	<b>235,232</b>	<b>277,896</b>	<b>488,523</b>

Source: Istat, Censimenti.

**Table 1.9.3** - Volunteers in no profit organizations, by sector and province, 1999  
Per cent of population, 16-84 years old

	Varese	Como	Sondrio	Milano	Bergamo	Brescia	Pavia	Cremona	Mantova	Lecco	Lodi	Lombardia	Italia
Culture, sport	3,13	3,53	5,69	<b>2,31</b>	5,81	3,49	2,80	4,39	6,21	8,23	4,40	<b>3,54</b>	<b>4,29</b>
Education and research	0,12	0,20	0,06	<b>2,00</b>	0,14	0,11	0,23	0,18	0,07	0,23	0,17	<b>0,92</b>	<b>0,29</b>
Health	0,59	0,88	0,38	<b>1,15</b>	0,97	1,08	0,76	1,50	1,51	1,71	0,68	<b>1,06</b>	<b>0,82</b>
Caring	0,93	0,97	1,12	<b>1,17</b>	1,96	1,29	0,70	0,75	1,43	2,02	0,98	<b>1,23</b>	<b>1,26</b>
Environment	0,09	0,28	0,49	<b>0,10</b>	0,36	0,22	0,24	0,12	0,16	0,29	0,10	<b>0,18</b>	<b>0,22</b>
Economic development and social cohesion	0,11	0,05	0,05	<b>0,06</b>	0,12	0,06	0,08	0,03	0,06	0,27	0,05	<b>0,08</b>	<b>0,09</b>
Political activity	0,12	0,04	0,05	<b>4,54</b>	0,21	0,12	0,06	0,35	0,21	0,19	0,05	<b>1,98</b>	<b>0,53</b>
Philanthropy	0,03	0,06	0,01	<b>0,97</b>	0,11	0,13	0,08	0,08	0,06	0,08	0,07	<b>0,45</b>	<b>0,12</b>
International cooperation	0,07	0,09	0,36	<b>0,15</b>	0,19	0,10	0,02	0,08	0,05	0,31	0,08	<b>0,13</b>	<b>0,09</b>
Religion	0,09	0,17	0,50	<b>0,26</b>	0,61	0,38	0,31	0,12	0,29	0,34	0,19	<b>0,30</b>	<b>0,34</b>
Trade unions	0,07	0,08	0,07	<b>0,09</b>	0,31	0,14	0,23	0,14	0,31	0,14	0,15	<b>0,14</b>	<b>0,17</b>
Others	0,01	0,00	0,04	<b>0,02</b>	0,04	0,03	-	0,03	0,01	0,04	0,04	<b>0,02</b>	<b>0,03</b>
	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>5,4</b>	<b>6,3</b>	<b>8,8</b>	<b>12,8</b>	<b>10,8</b>	<b>7,1</b>	<b>5,5</b>	<b>7,8</b>	<b>10,4</b>	<b>13,8</b>	<b>7,0</b>	<b>10,0</b>	<b>8,2</b>

Source: Istat, Censimenti.

### 1.9.1.3 Changes In Family Structure

Changes in family structure, with more and more people living alone especially in the big city, are possible cause of concern. In the area, the number of members for each family dropped to 2,38 from 2,61, between 1991-2001; however, the trend is common to all the provinces and the country.

Two main factors could explain this decline: the ageing phenomenon and the marital crisis.

Moreover, child development is powerfully shaped by social capital. Trust, networks, and norms of reciprocity within a child's family and larger community have far reaching effects on their opportunities and choices, and hence on their behavior and development.

Broadly speaking, the family is no more a broad base of community life and what results is that social capital is weakened.

**Table 1.9.4** - Members of the family (average number) - Italy, Lombardia region, Provinces of Lombardia

	1971	1981	1991	2001
Varese	3,12	2,89	2,73	2,52
Como	3,19	2,94	2,73	2,53
Sondrio	3,46	3,06	2,75	2,51
<b>Milano</b>	<b>3,01</b>	<b>2,79</b>	<b>2,61</b>	<b>2,38</b>
Bergamo	3,41	3,03	2,80	2,57
Brescia	3,35	2,96	2,75	2,51
Pavia	2,88	2,61	2,45	2,31
Cremona	3,12	2,77	2,62	2,45
Mantova	3,43	3,02	2,79	2,56
Lecco	3,27	2,96	2,76	2,55
Lodi	3,17	2,87	2,72	2,52
<b>Lombardia</b>	<b>3,13</b>	<b>2,86</b>	<b>2,67</b>	<b>2,45</b>
<b>Italia</b>	<b>3,35</b>	<b>3,01</b>	<b>2,83</b>	<b>2,59</b>

Source: Istat.

#### 1.9.1.4 Trust

To quote Putnam<sup>4</sup>, social capital greases the wheels that allow communities to advance smoothly. Where people are trusting and trustworthy, and where they are subject to repeated interactions with fellow citizens, everyday business and social transactions are less costly. Lower transaction costs, due to a high level of trust and a cooperative spirit, make economic relationship easier, especially between the financial institutions and its customers.

An interesting indicator, which roughly measures the trust level in a specific area, is the short term interest rate on cash-flow financing. Interest rates in the Province of Milan are lower than in other areas: the difference between the Lombardia region and the region of South Italy are still more pronounced. In 2003 the differential with Objective 1 regions amounted to 1,94%.

**Table 1.9.5** - Short term Interest rates, 2004. Italy, Lombardia region, Provinces

<b>Milano</b>	<b>5,7</b>
Bergamo	6,8
Brescia	6,5
Como	7,0
Cremona	7,1
Lecco	6,9
Lodi	6,7
Mantova	6,9
Pavia	7,2
Sondrio	7,0
Varese	7,0
<b>Lombardia</b>	<b>6,1</b>
<b>Italy</b>	<b>6,6</b>

Source: Istituto Tagliacarne.

#### 1.9.1.5 Crime Rates

A growing body of research suggests that where trust and social networks flourish, individuals, firms, neighbourhoods prosper economically. Social capital can help to mitigate the insidious effects of socioeconomic disadvantage. In high social-capital areas, the welfare is more widespread, the people are friendlier and the streets are safer. Places have higher crime mainly because people don't participate in community organizations, younger people don't have opportunities and aren't linked through networks of friends. Crime can be reduced and educational achievement enhanced through the strengthening of social capital.

To assess crime rates in the area, we consider two indicators: the number of denounced minors (<18 years old) for 100.000 and the number of reported crimes compared to population.

With regard to the crime rates the Province of Milan doesn't seem to perform so good: the index of youth delinquency is above the regional and national average. In 2001 it recorded 205 minors denounced for 100.000 units; the widespread crime index (number of reported crimes/population) in 2001 was still above.

<sup>4</sup> Robert Putnam (2000) *Bowling Alone: The collapse and revival of American community*, New York: Simon and Schuster: 288-290

**Table 1.9.6 - Crime rates, 2001. Italy, Lombardia, Provinces**

	Number of denounced minors ( <18 years old) for 100.000	Number of reported crimes/population *100.000
<b>Milano</b>	<b>205</b>	<b>5.153</b>
Bergamo	81	2.941
Brescia	98	3.889
Como	67	3.217
Cremona	84	2.179
Lecco	220	2.978
Lodi	47	2.527
Mantova	44	1.759
Pavia	123	3.007
Sondrio	115	2.304
Varese	163	3.415
<b>Lombardia</b>	<b>144</b>	<b>3.930</b>
<b>Italy</b>	<b>174</b>	<b>3.797</b>

Source: Annual of statistic Lombardia Region, 2004.

### 1.9.2. Social cohesion issues<sup>5</sup>

The gradual transition of the City of Milan to a “global city” is radically changing the social structure: for many people this means more opportunities in terms of economic resources and social capital, but for others the process leads to fragility, exposure to new social risks and social fabric dismantling. These transformations don’t depend on a single cause, but refer at the same time to the economic, social and demographic structure, and it’s difficult to identify which is the crucial factor; therefore it’s not meaningful to ascribe the responsibility of emerging social unease to the globalization process or the family crisis. The process that is taking place is not a real social crisis, with phenomena and cases of social exclusion and clear unease; it is instead a broad “suffering without unease”, that is a vulnerability which undermines the sense of safety and makes ordinary life more difficult.

This progressive changing in the social fabric could be broken down in five parallel processes:

- the development of new social and territorial polarizations which suggests that the economic and social structure is growing along new axes and is producing new dualism;
- the increase in the social instability, due to job insecurity, temporary employment, housing precariousness and family fragility;
- an overload of functions to the families that have to meet the needs of care and social security;
- the progress of the “multiethnic city” due to heavy immigration flows, with serious problems of social integration.

In the last decade Milan has experienced a persistent growth in the economic and social disparities, that is apparent when we consider the income differential and the living structure. Dynamics of economic disparities show a relevant increase in income inequality, mainly due to the process of transformation in the economic system and labour market. Some professional and social categories have enjoyed the available opportunities, in particular those involved in the service industry (credit and financial services, fashion, design) or endowed with strong professional skills, but others remained out of the game.

This is confirmed by two relevant elements. In the last years wages dynamics show a trend lower than rate of inflation: the increase in the prices level by 5,7% between 2001-2003 strikes against a lower rate in average wages, in particular for workers (+1%) and employees (-3%).

<sup>5</sup> Ranci. C., “Problemi di coesione sociale a Milano”, in G. Micheli, C. Ranci, *Equilibri fragili. Vulnerabilità e vita quotidiana delle famiglie lombarde*, Guerini, 2004

Moreover, the relative poverty in the city results rather high (14%<sup>6</sup>), clear indication of income inequality and polarization. This trend not only concerns people placed in the low floors or in the margin of the social structure, but also the middle and working class.

A tendency for change towards the creation of new polarisations can be seen also in the living structure: some residential areas are pushed up by demand side, others are completely neglected and left to one's own resources, with an intense process of gentrification and substitution in the inner circle that moves poor people on the edge of the city. Poor living conditions tends to broaden in some deteriorated areas of the core and in the suburbs, where prevail dormitories and public housing; this phenomena, not enough addressed by public policies, could generate real "territories of unease" such as some dormitories of public housing in the suburbs of Milan (Ponte Lambro, Molise Calvaire, Quarto Oggiaro).

A second process to be considered is the spread of some instability factors that makes people life less guaranteed; instability refers to differs social mechanism, such as labour market, housing system and family. Dynamics in the labour market show a strong tendency to employment precariousness, with an increase in non permanent job and atypical labour: flexibility of labour has increased up to 15% of the total provincial employment (data IRES-CGIL 2003). In the 2003 the 58% of new employed in the province of Milan has an atypical contract: this phenomena concerns mainly employees with low skills, young people and women (49% of new atypical jobs), but also regards adults (in the 2002, the 17% of new employed).

The family crisis is grounded by some statistics: the number of marriages in the decade 1991-2001 is dropped by 26% and matrimonial causes are increased in the same percentage. Moreover the increase in the number of single parent families and the prevailing of single people have direct effects on social stability; in 2002, singles account for 37% of families and the number of over 65 people living alone amount to 1/3 of the total.

All these factors contribute to change the social organization, resulting in weakness of social guarantees, difficulty to achieve financial resources (the flexibility of labour clash with the financial stability needed to locate or buy an house), frailty of social and familiar relationships.

Despite the prevailing trend, family continues to play an important role in granting "apart support" to one's members, but this generates an overload of functions: to take care of children, to meet the needs of the elderly, to sustain financially young people. In 2002, just 6000 children found a day nursery as against a demand of 34.000 children; the over 65 people not self-sufficient are about 65.000, but just 4000 get day care from the social work.

In the last resort, the overload of duties depends on the convergence of three processes:

- an increase in the social demand of care due to some dynamics: the population ageing, a bulge in the birth rate, changes in family structure;
- a lesser capacity of family to meet these needs;
- the lack of care services, public and private.

Milan is becoming a real "multiethnic city" with 200.000 people of immigrants, among which about 14% is irregular. Heavy immigration flows have generated serious problems of social integration because of the difficulty to achieve housing and stable employment: the 25% of immigrants lives in poorly housing conditions and the 11% lives in the place of work.

In the absence of a deep stabilization of immigrants, the risk is that the next flows of immigrants will generate a real social dualism.

In general, Milan is still a cohesive city with a quite good social and economic balance and without deep social conflicts. Nevertheless, the social fabric is growing weak with a progressive undermining of some

---

<sup>6</sup> Benassi-Mingione, 2003

key elements to maintain social cohesion, such as family care, job security, income distribution and social inclusion.

### **1.9.3. Main actors and Initiatives of social cohesion**

Social capital in the province of Milan can be improved mainly through measures aimed to tackle social exclusion and to reduce spatial concentration of deprivation and disparities, fostering for instance the accessibility to basic services in urban areas.

In the provincial area, there are two main issues to be addressed: the promotion of community development in the suburbs and the revitalization of brownfield sites; the challenge of meeting housing needs, especially for immigrants, young people and the lower class.

#### *1.9.3.1 Community Development*

See paragraph 2.5.

#### *1.9.3.2 Social Housing*

The concept of social exclusion is related to poverty, but it makes real sense only in the broader perspective of citizenship and integration into the social context. Social exclusion has a strong spatial connotation, especially in the metropolitan areas affected by the development of urban neighbourhoods of multiple deprivation, in which different processes of exclusion reinforce one another. These neighbourhoods, hit by multiple social exclusion, are increasingly inhabited by people left on the sideline in economic and social development, as people with resources migrate out of the neighbourhood, and those with little choice of residence increasingly are allocated by social housing there.

In Milan, it's estimated that 50,000 households lack adequate housing, but given the almost complete lack of a public housing policy, they are expected to remain in the same situation, with the only option of abandoning the city to find a place to live in the outskirts of the metropolitan area where housing is more affordable. Today, the only available means to cope with the problem is to obtain one of the few apartments in public housing estates that become available (less than 500 per year in Milan) and that are not illegally occupied.

A creative answer to this problem has been developed through the mobilisation of various private and semi-public actors, in particular with the activity of the Cariplo Foundation, the most important bank foundation in Italy.

This institution is very active in the Lombardy Region in many fields, from supporting the interventions on cultural heritage to sustaining cultural and scientific institutions and helping the third sector in delivering social services. In the past few years, Cariplo Foundation has opened a new track of funding in the field of social housing, supporting third-sector initiatives particularly directed to aiding the development of housing projects for immigrants and low income people.

In 2004 the Cariplo Foundation has launched two important initiatives: a new Foundation for Social Housing and the Social Housing Investment Fund, an instrument to gather financial resources coming from the Cariplo Foundation and other institutional investors, with the task of acquiring or realizing buildings to be rented.

In these innovative schemes, the third sector organisations should become the managers of the estates that are produced by the Social Housing Investment Fund and be committed in a series of parallel actions to sustain the families that live there<sup>7</sup>.

---

<sup>7</sup> Balducci A., "Creative Governance in Dynamic City Regions", DiAP, Milano 2004

#### 1.9.4. Cooperative system

The cooperative sector in the province of Milan is of a healthy and significant size and the system is well established and exceedingly well organized; it can be divided into two areas:

- consumer co-operatives;
- work co-operatives.

Worker cooperatives are major employers in a number of towns in Italy's North, especially in Milan, while consumer cooperatives, if taken together, are the single largest grocery store chain in the country. Beneficial legislation has certainly played a key role in these figures: a preference for cooperative enterprise is enshrined in the Constitution.

Cooperatives in Italy also have a recognized role historically in job creation. For this, they are rewarded with the significant tax advantage that allows that any retained earnings of a cooperative organization are not subject to taxation at all. This provision gives cooperatives a major advantage, greatly enhancing their sound capitalization and allowing cooperatives to stay in business and weather hard economic times with much greater success than their privately owned peers. If a co-op does go out of business, any remaining assets are liquidated and proceeds go to help the promotion and development of other cooperatives. Peer pressure within the cooperative movement operates to place any laid off workers in jobs with other local coops as well.

A second more recent legislative innovation added in 1992 is the national law providing that 3% of annual profits of all cooperatives must be contributed to a special fund to provide equity investments and low-interest loans for the growth of new cooperatives.

Relief for the financial strain on the national system of social welfare has been found in Italy through an innovative form of cooperative. A blend of old and new features, using volunteers and what would be considered less desirable workers, the Italian *social cooperatives* are deserving of notice. These cooperatives developed to furnish welfare services to the "economically weaker layers of society" as Italy, like other western European nations which had developed extensive "welfare state" programs, sought to diminish the financial burden of such programs. They were also able to make a dent in the unemployment problem, which by the 1980's was extensive in Italy as well as other west European countries. Certain marginal groups of the unemployed were given work in the co-ops, under special arrangements which also made use of volunteer help.

The first experiments with this new entrepreneurial form began in Italy in the late 1970's. Major growth followed the enactment of a law on social cooperatives. But that law, first drafted in 1981, was ten years in the making, as political parties and Italy's major cooperative groups debated its exact form. The law was passed late in 1991.

The law regarding social cooperatives (art. 1, law 381/91) gave impetus to their expansion; the law further clarifies two basic forms:

- (A) social service, in the areas of health care, care of the elderly, and education;
- (B) the creation of employment for certain disadvantaged groups: namely, physical or mental invalids, present or former psychiatric patients, drug addicts, alcoholics, young workers from troubled families, and criminals subject to alternatives to detention.

The Law of 1991, which codified the former volunteer associations and co-ops into a defined cooperative form, prescribed limits but also gave the co-ops specific rights and benefits, and more generally, a positive attitude of support from the state. The law also formulated the connection of the co-ops to the local community. In the case of the "B" coops, the law created a wide scope of help for people with specific impediments to employment. Further, the new firms could connect to a strong old cooperative tradition in



Italy, which has many worker cooperatives and a couple of national cooperative federations. For the Italian cooperative movement as a whole, the social co-ops have meant the exploration of the broader social mission of cooperative work, and its orientation toward the whole community, an aim which goes back to the beginnings of the movement.

There is a clear difference between traditional cooperatives and new social ones: the former are friendly societies born to meet employment or housing needs of the members; the latter developed to furnish welfare services to the local community.

As to growth of the social cooperatives since 1991, several national surveys indicate considerable expansion during this decade. An earlier survey in 1986 had identified just under 500 co-ops, serving 35,000 people. A new study in 1994 identified some 2000 co-ops, with about 40,000 paid workers and 15,000 volunteers, providing services to approximately 200,000 clients. By 1996, still another investigation found roughly 4000 registered social co-ops, of which it could verify that at least 3000 were active. They had a grand total of about 100,000 members, of which 75,000 were paid employees, 9,000 volunteers, and the remainder non worker members. The total number of clients was estimated at 400,000. In 1996 social co-ops comprised 4% of the broader Italian cooperative sector, and provided employment to 10% of persons in the coop sector.

The geography of the Italian social cooperatives is also of interest. Strongest development has occurred in the north of Italy, with its heart in the province of Brescia, where there is one social cooperative for every 8000 persons (compared with a ratio of 1/25,000 persons for Italy as a whole). The north has also been the most fertile soil for other forms of Italian coops; thus a certain “culture of cooperativism” already existed there. In 1996, 60 to 63% of social co-ops were identified in the northern regions, and the “B” employment cooperatives were more numerous there. Central and southern regions together accounted for 37 to 40% of the social cooperatives, and the “A” or social care co-ops were more prevalent in those parts.

In the province of Milan total social cooperatives amounts to 385 units, about 40% of social co-ops in the Lombardy region; between 1998-2002, the number of co-ops jumped from 265 to 385. Those in the “A” category, performing social services, health care, and education, are decidedly more numerous than those creating jobs for the hard-to employ (“B” category). This is scarcely surprising, given the difficulty of creating employment and providing training for people with the broad spectrum of handicaps designated by the law.

To compensate for the small-size of most coops, geographic consortia has been set up, which link all the social coops of a locality and region. A network of some 40 regional, provincial and national consortia now provides a superstructure, or support structure, for all of Italy’s social coops. The consortium provides its member co-ops with advantages deriving from a larger economic scale. It is also politically useful in streamlining the dealings between the regional political authorities and the member co-ops. At the national level, the Consorzio Gino Mattarelli functions also as a research organization which studies the workings and development of the social cooperatives. The regional consortia may be seen as second level cooperatives; or as support structures, giving assistance to their member co-ops, as has so often proven useful in cooperative history. They too are a vital component in the co-ops’ success.

Social cooperatives deserve to be known and studied indeed. They give clear evidence that supplying social welfare services in a non-governmental program with government support can be economically viable. Further, they show that a cooperative may work when composed of people with diverse interests, resources, skills, abilities, and needs: that is, a multi-stakeholder cooperative organization is viable. In addition, the employment co-ops indicate a way of bringing help through jobs to people with serious

problems, given innovative structures and government support. For other nations, regions or localities facing similar problems, these several achievements can be instructive.

**Table 1.9.7 - Social co-operatives in the Lombardy Region by Provinces - Year 2002**

	Cooperatives class "A"	Cooperatives class "B"	Consortium	Total
Varese	51	31	2	84
Como	41	14	2	57
Sondrio	18	11	1	30
<b>Milano</b>	<b>239</b>	<b>135</b>	<b>11</b>	<b>385</b>
Bergamo	68	39	7	114
Brescia	104	84	12	200
Pavia	35	13	0	48
Cremona	25	14	1	40
Mantova	33	16	1	50
Lecco	16	12	1	29
Lodi	8	8	3	19
<b>Lombardia</b>	<b>638</b>	<b>377</b>	<b>41</b>	<b>1.056</b>

Source: Lombardy Region.

**Table 1.9.8 - Social co-operatives in the Lombardy Region by Provinces - Year 1998**

	Cooperatives class "A"	Cooperatives class "B"	Consortium	Total
Varese	26	28	2	56
Como	35	12	2	49
Sondrio	9	11	1	21
<b>Milano</b>	<b>157</b>	<b>102</b>	<b>6</b>	<b>265</b>
Bergamo	44	32	1	77
Brescia	78	66	5	149
Pavia	18	9	0	27
Cremona	14	15	1	30
Mantova	19	12	1	32
Lecco	14	11	1	26
Lodi	7	6	2	15
<b>Lombardia</b>	<b>421</b>	<b>304</b>	<b>22</b>	<b>747</b>

Source: Lombardy Region.

## 1.10. ACCESSIBILITY AND INFRASTRUCTURES

### 1.10.1. Density and quality of the area's infrastructure

#### *1.10.1.1 Morphology of the networks*

As acknowledged, Milan represents the centre of a markedly radial organisation. This organisation, based on the networks of roads, railways and artificial waterways, has never really been accepted, as testified by the frequent (and often not implemented) corrective measures laid down in various city master plans, designed at a regional, urban and local level.

The most frequent forms of interventions designed for the Milan metropolitan area are focused on two main priorities. The first of these priorities consists in consolidating the “structure-like” feature of the radio-centric organisation by strengthening some of the urban centres which are located along the original radial axes, and are already considered reference poles for the territorial context. The second priority is oriented to build a system of crosswise axes intersecting the historical radial roads in order to establish a sort of “dripping” system: this goal was achieved only with reference to tangential axes, since the whole project has to overcome practical difficulties related to institutional and social conflicts.

In spite of the planning intention, a process of progressive and spontaneous growth of settlements along the radial routes of the region is going on.

Many of these radial routes have been doubled or widened in order to face the increasing mobility demand consequent to the growth of settlements.

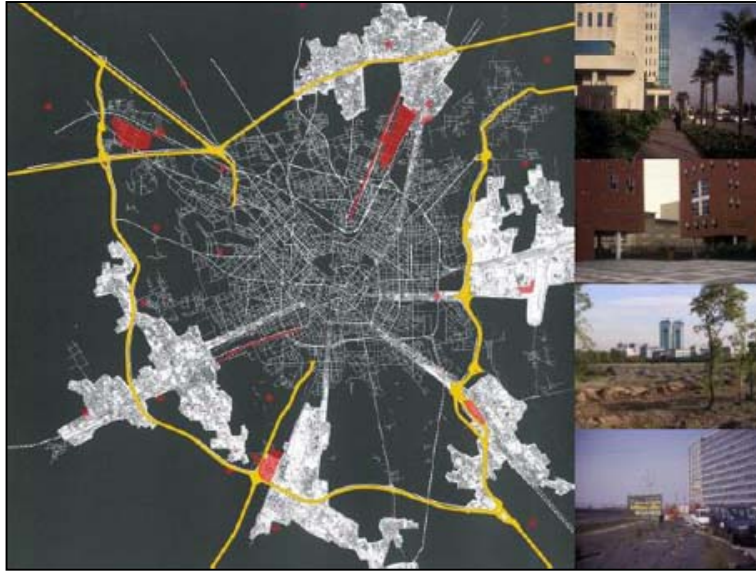
The construction of the east and west ring roads of Milan, currently still the only high speed roads cutting across the historical radial axes, has started to modify the territory and has contributed toward deforming the historical infrastructure networks.

This triggered a process of localisation of new and different central places which are becoming generators of wide range of new diversified relations.

Yet, the original radial matrix of the Milan area continues to prevail, even though in recent years new infrastructuring tends to strengthen the processes of modification: the mutual interaction and interference between the dynamics of settlement growth, the mobility features and characteristics of road infrastructures are producing, in fact, a progressive shift away from the underlying radial structure.

This observation appears pertinent because in the radial-centric road scheme characterising the Milan area it is possible to discern a new network of nodes supporting trasversal relations. These new nodes and relationships represent the current transformation processes which are producing new origins and new destinations in the mobility scheme.

The original road network, in fact, is now becoming more specialised and being substituted by other roadways which, initially responding to the increasing demand for mobility, assume more and more the role of territorial “facts” also giving rise to new central spaces (management headquarters, shopping malls, entertainment centres, new fair trade polarities...), for which the accessibility is often only by road.

**Figure 1.10.1** - New central places around the ring roads in the Milan Region

Source: Lanzani, Manfredini, Pucci, 2004.

#### 1.10.1.2 Infrastructure Provision: Rail And Road Density

Province of Milano, comparing with the average data of the Northern Italy (51,95 km/kmq; Lombardia region 50,1 km/kmq, Italy 55,24 km/kmq), achieves a good level of the roads density (69,42 km/kmq) and, above all, of the county roads and motorways, with a high frequency of the exits that improve the connection with the territories.

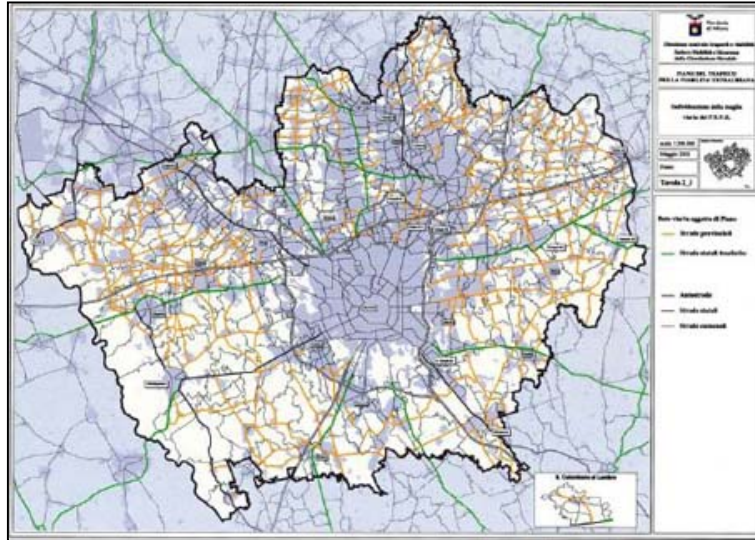
The comprehensive supply of the main roads networks in the province of Milano comprises **186,2 km** motorways, **263,2 km** of national roads, **1.045 km** of county roads and **900 km** of municipal roads (source: Provincia di Milano, 2005).

The road density is more significant in the northern districts of the Milano province, where the presence of historical radial road and rail infrastructures that, in some area (axis of Sempione, Nuova Valassina and Nuova Comasina motorways), constitute an urban continuum as a linear conurbation of commercial and productive settlements, is losing its continuity and becoming segmented, more influenced by the circulation of the fluxes, and congested.

Comparing the roads equipment (density of the road networks), with the capacity of the road network, finalizing to meet the needs of the potential request, expressed as number of inhabitants, the results show yet the gap between the potential mobility request<sup>8</sup> and infrastructure offer.

The potential request of the road network (km/inhab) in Province of Milano reach the lowest value not only for the provinces in Lombardia region, but also for all of the provinces of the Northern Italy, confirming the high level of saturation and “vulnerability” of the road network, unaltered in the last period.

<sup>8</sup> The roads infrastructure equipment is calculated as density of road infrastructures dividing the total length of the main roads, motor-roads with the province surfaces. The potential request of road infrastructures is simplified calculating the Province inhabitants /total length of road infrastructures.

**Figure 1.10.2** - Major infrastructure networks in the Milan Region including trunk rail and road system, airport

Source: Provincia di Milano, PTVE.

The traffic survey on the road network (figure) confirms this result, showing a high saturation level of the radial roads converging on Milano, as well as of the ring road system, in particular the east and the north ring roads, the nearest to the high-density urbanisation of Milano and using also for the urban mobility practices, where a linear conurbations of commercial and productive settlements have formed.

The traffic congestion figure on the major roads network in the Milan Region confirms the traditional dualism between the north and the south of the Milan region<sup>9</sup>, even if the southern and southern-east areas have been the most dynamic in the urbanisation rhythm noticed during the 80s and 90s, with effects on mobility practices.

**Figure 1.10.3** - Traffic congestion on the major roads network in the Milan Region

Source: Provincia di Milano, *Mobilità e territorio. Dinamiche attuali e obiettivi di integrazione del PTCP*, Milano, 2003.

<sup>9</sup> In the northern area urbanisation is continuous and supported by historical radial road and rail infrastructures that, in some area, constitute an urban continuum (axis of Sempione) or a dense urbanisation with a compact agglomeration near Comasina and Valassina motorways. In this area the infrastructure deficit is very important, above all in reference to the “transversal” roads. In the southern part, rural centres and extensive settlements still prevail on intense urbanisation.





Ferrovio link and the Porta Vittoria station, in frequency (one train every 30 minute), in integrated price, in coordinated time tables and signage<sup>12</sup>, and in density of stations with 1,7 Km on the average distance between the FNM railway stations; and 4,3 km in the RFI railway stations.

Conditions of saturation in some railway lines (254 km of the railway lines, like 40,7%, are one-track again), and low performances of the SFR stations remain, causing delay and inefficiency in the public service.

**Figure 1.10.5 - Servizio Ferroviario Suburbano**



Source: Regione Lombardia.

If this is so, the main questions are:

- an insufficient public transport endowment for satisfy the mobility demand, in relationship with a reduction in radial trips and an increase in transverse movements; the deficit is in the density of the networks, in the performances and in the morphologies (radial matrix) of the public transport lines;
- the difficulty to propose the traffic calming policies in Milano city town, in default of the qualified and connected transport public network;
- the need to improve the multimodal integration between different transport networks, solving the congestion in the road network, with solutions as well as the tariff integration rail/road and urban/suburban areas, promoting the **cooperation between different municipalities** and the **coordination in the public transport policies**, besides flexible type of public transport (car pooling, car sharing...);
- solving the saturation of some railway lines and the inadequateness of the some railway stations, improving the interconnection, the safety, the quality of the railway services ...;
- the need for transversal infrastructure axis, solving the radial structure of the main road systems incapable to satisfy the mobility practices and the “transversal” relations in a polycentric area;
- settling the planning policies with accessibility offered by the existing and forecast networks, limiting the urban sprawl, but also the saturation of the new roads with indiscriminate linear conurbations of commercial and productive settlings (see Territorial Plan for Provincial Coordination of Milano).

In this context, the projects regarding the infrastructures in the Territorial Plan of the Province (PTCP- Territorial Plan for Provincial Coordination) and in some other regional and national plans (The General Plan for Transports and Legge Obiettivo) establish a set of interventions on the Milanese region which try to satisfy the mobility demands which characterised this territory (see later).

<sup>12</sup> Every day, 365.000 passengers (middle of which from Milano city town) depart from the S lines stations of the SFS; they are the 70% of the passengers of the whole region (Source: Regione Lombardia, Dati di frequentazione 2003). The 51% of the passengers reach the station on foot (Source: indagine OD, Regione Lombardia 2002).

### 1.10.1.3 Airport System And Air Accessibility

The Milano airport system includes:

- city airport of Milano Linate, nearest to Milano city town, third Italian airport after Fiumicino and Malpensa airports;
- international airport of Milano Malpensa (in province of Varese, approximately 50 km from Milan), in the first place in Italy for the traffic charter with 33 operating airlines and 69 destinations;
- Orio al Serio airport (in province of Bergamo, approximately 50 km from Milan), with an important passengers movement in charter flights.

Linate and Malpensa, managed by SEA<sup>13</sup>, form an airport system with a great number of air connections to Italy, Europe and the world. The Milan airport system in 2004 has received 27,5 million passengers in transit, with an increase of 4.3% regarding the previous year. In particular, Malpensa Hub has increased the passengers movements of 5,3%. The freight traffic, for which the Malpensa hub confirms its Italian supremacy, it has had an increase of 12,5% for a total of 363.000 tons of cargo movements (source: SEA 2005).

In 2004 the quality of the services is improved also.

The airport services on time in Malpensa hub is in improvement regarding 2003: with 81% of the punctual flights, Malpensa is, in the 2004, second European airport, after Frankfurt, for flights on time (source: Association of European Airlines, 2004); moreover, the missing baggages on the airport of Malpensa in the 2004 have been 32% in less regarding those of 2003. Malpensa, also in this case, confirms the good performance of the first semester of 2004 when for this service it has turned out, always according to data, better than London, Frankfurt, Amsterdam and Paris airports.

In the December month they have been ended also important safety works that have concurred to solve the problems quickly in reference to the modification of the safety standards (sophisticated metal detectors, upgraded the number of gates and the passengers assistance supplied from specialized staff).

To these data they join the passengers and cargo movements of Orio al Serio airport, managed by Sacbo<sup>14</sup>, that in 2004 closed with a total figure of 3,338,000 passengers corresponding to an increase, with respect to 2003, of 17.3 percent; and 130,000 tons of cargo, corresponding to an increase of 1.8 percent.

Orio al Serio airport carries out a complementary and, in some way, specialized role regarding Malpensa and Linate airports: both scheduled flights, with more than 2,700,000 passengers (16.8 percent more than 2003) and charter flights, in clear recovery compared to last year with an increase of 20.8 percent, contributed to this growth trend and resulted in the 600,000 mark being exceeded by a healthy margin<sup>15</sup> (Sacbo, 2005).

The possibility to have a disarticulated airport system on three airports in Milan region, permits to catch up the highest levels of airport equipments<sup>16</sup>, regarding national the medium data and of the Italy north; condition moreover valued from the good access to international flight services and from the frequency of the connections also with inner destinations (Italian).

<sup>13</sup> SEA is a joint stock company controlled by the Municipality of Milan with a 84.56% share. The remaining shares are held by the Province of Milan (14.56%) and other minor public and private shareholders (0.88%).

SEA, the company that manages the airports of Linate and Malpensa, provides centralized airport services such as airports coordination, information system and information to the public based on data furnished by the airline companies - surveillance and retail services through third-party agreement. SEA is also responsible for the planning, construction and maintenance of new airport infrastructures and buildings of Linate and Malpensa and of other airports all over the world.

<sup>14</sup> SACBO is a financially secure company that manages the Orio al Serio airport.

<sup>15</sup> The use of new generation aircraft with large capacities by airlines operating out of Orio al Serio has allowed a greater number of passengers to be transported and at the same time reduced the total number of aircraft movements by 6 percent compared to 2003 – equivalent to three thousand less movements throughout the year.

<sup>16</sup> The airport system equipment is calculated as aircraft apron size (sq.m), length of runway (mt), technical equipments of aid to navigation, distinguished in luminous visual and radioelectric systems.



However the levels of accessibility regarding the territorial system of reference are weak:

- railway public transport, connecting Milano and the Province with Linate and Orio al Serio airports lacks;
- the railway line to Malpensa hub is not directly connected with the main railway station of Milano city town (Milano Centrale railway station that it guarantees the main national and international connections), bringing “tracks breaks”;
- the connections with Malpensa, international hub, are at the moment preferentially with Milan city town, with consequences on the possibility to increase the effects of international accessibility offers from the airport system, on the North Italy area.

These conditions make urgent to “networking” Malpensa hub with the territory of the region, realizing the railway services that connect it to the main poles of the Province and of the Region, without to pass obligatorily for Milan city town.

It is also true that is in realization/planning new railway connections and new public transport lines in order to improve multi-modal accessibility to these airports like (see after):

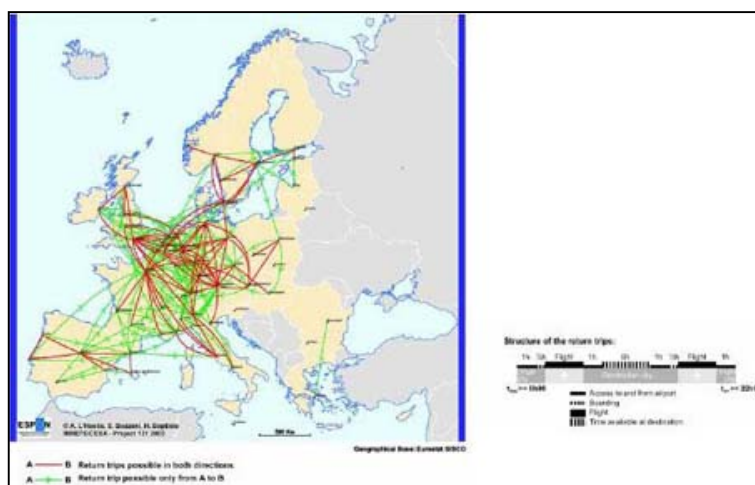
- the new underground line MM4 Linate Airport-Lorenteggio (7 km);
- completion of the railway interconnection with international hub of Malpensa (national and regional railway lines connexion), from Novara to Bergamo;
- the new four-lane motorway Boffalora-Malpensa which will improve the access from the south-west of Milan Province to the Malpensa airport.

**Table 1.10.2** - The airport system in Milan region

Airport	Distance from Milano city town	Accessibility in public transport	Manager company	Airport site Total area (hectares)	Aircraft Apron (sq.m)	Runway (mt)	N. airlines operating	Traffic volume (passenger and freight) 2003
Bergamo Orio al Serio	49 km	Bus	SACBO	350	70.000	3.024	19 airlines	2,843,500 passengers 128,686 tons of cargo
Milano Linate	8 km	Bus, taxi	SEA	396	363.000	3.060	20 airlines	8,755,971 passengers 24,551 tons of cargo
Milano Malpensa	48 km	Railway, bus, taxi	SEA	2.500	T1: 912.000 T2 : 306.000	Runway P1: 3.920 Runway P2: 3.920	33 airlines; 69 destinations	17,514,720 passengers 319,513 tons of cargo

Source: SEA, SACBO.

**Figure 1.10.6** - City network daily accessibility by air between the 62 Metropolitan European Growth Areas (MEGA)



Source: ESPON Project 3.1., 2004.

### 1.10.2. Accessibility

Accessibility in the Milan region must be assessed on three territorial scales:

- *International accessibility*, as the access to the long distances, to global and European networks;
- *Regional accessibility*, as the access to a wide territory which goes beyond the borders of the province and is not a defined administrative area (like Province of Milano), characterized by a variety of places with socio-economical and settling specifications, as well as of mobility practices that define the spatial expansion of the relations;
- *Local accessibility* as access to Milano city town and the nearest municipal districts.

The accessibility is an important tool in the territorial guidelines of province of milano that, in the ptcp, focus on the evaluation of accessibility, improving the interconnections between urban growth and mobility networks. the evaluation is finalized to verify if, in the local planning, the urban development for the networks capacity is sustainable. the ptcp singles out a set of main territorial functions for which the ptcp defines the accessibility profile and the requisites for the networks connexion.

The key factor for formulating policies in this respect is that of accessibility policies, because accessibility includes both qualities of the transport system as well as characteristics of land use patterns (density, functional mix). In the most interesting cases (Netherland policies), accessibility is strongly connected with the urban development patterns: accessibility refers to the increasing access to resources that people get through improvements in the transport system, can expect and support policies for equal opportunities for the urban population, can help in planning the evolution of the urban structure, generating new opportunities for human interaction, can help articulate urban planning and design strategies, protecting natural areas from urbanisation. This case study - in which it is possible to document, starting from the developments in different types of transportation systems, how mobility environments are structuring - shows that it is not the policies as such that are of prime importance for these sustainable developments, but some principles about the development of land use and transport that achieves sustainable accessibility.

#### 1.10.2.1 International accessibility

The efficient access to global and European networks is a goal for the increasingly knowledge based and often advanced industry to stay competitive, but also to be able to provide a good quality of life for the inhabitants while still offering.

As acknowledged, an efficient network for transport is a key means for providing a big enough market potential allowing for a diversified economic structure and labour market, which is necessary for providing business services with a high degree of specialisation.

At the international scale the evolution of European institutions in transport regulation will then be a focal point of interest for this issue. In more recent policy statements of EU Commission mainly the White Paper in transport policy (and the related proposals for the TEN review), as well as in considerations about the ESPD (Europe Spatial Development Programme), transport networks have been considered as a way to reinforce not only the competitiveness, but also cohesion, so that the links between spatial and transport objectives can be strengthen.

**Table 1.10.3 – European transport policy goals, aims and actions**

TENs Aims	Competitiveness	Cohesion	Sustainability
Inducing multimodality	Productivity improvements by better modal specialisation (adaptation of each mode to its comparative advantages)	Intermodality in EU hubs will facilitate better accessibility from peripheral areas to larger EU markets.	Potential increase of traffic attracted by environmentally friendly transport modes (e.g. rail in relation to road for medium distance trips in the center of Europe).
Citizens	Improvement of access to TENs,	Accessibility diffusion to	Land-taking reduction by using existing

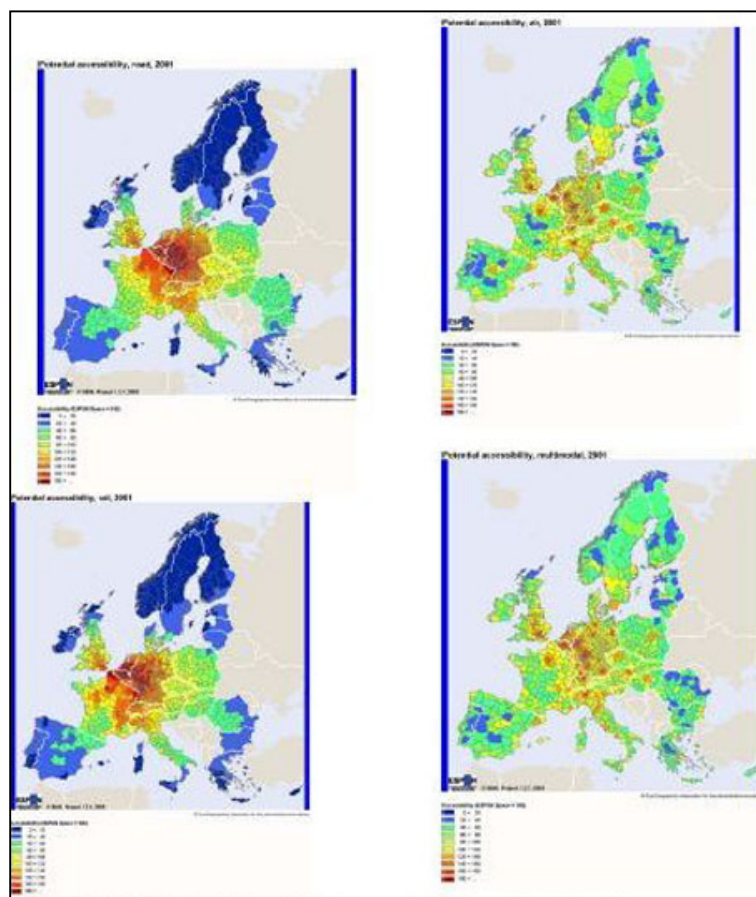
networks (local-regional connections to TENs)	making TENs more profitable and facilitating a better use of TENs excess of capacity for regional traffic, when feasible.	larger landlocked areas through regional capillarity	excess of capacity of different scale networks
Fair pricing	Capacity optimisation on congested TEN links	Subsidies to peripheral relations can become explicit	Internalisation of the external costs of transports.

Source: EU, Espo Project 1.2.1., 2004.

If the improvements in the multimodal networks are of crucial importance, province of Milano has a good level of multimodal potential accessibility<sup>17</sup> in reference to the average accessibility values in EU countries (source: Espo 1.2.1. Project): for the Milan region, the combined effect of high quality surface transport infrastructure (rail and road) and air accessibility (good access to international flight services) leads to the good performance in terms of multimodal accessibility.

Province of Milano is between the Regions in the Northern Italy with clearly above average accessibility comparable with the regions in an arc stretching from Liverpool and London via Paris, Lyon, the Benelux regions, along the Rhine in Germany to Northern Italy.

**Figure 1.10.7 - Potential Accessibility by road, rail, air, and multimodal**



Source: ESPON Project 1.2.1, 2004.

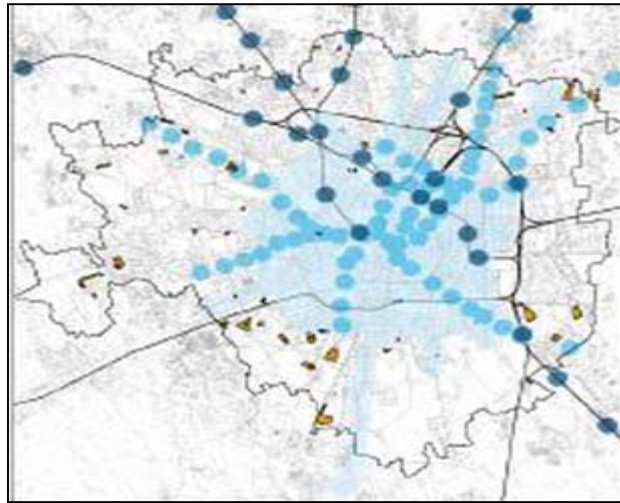
#### 1.10.2.2 Regional and local accessibility

<sup>17</sup> Potential accessibility is based on the assumption that the attraction of a destination increases with size, and declines with distance, travel time or cost. Destination size is usually represented by population or economic indicators such as GDP or income (Schürmann et al., 1997, Wegener et al., 2002).

The main problem about regional and local accessibility is to assure the international accessibility diffusion to larger landlocked areas through regional capillarity of the networks, solving also the previous demands of the transversal axis in a multipolar structure of the territory (i.e. Pedemontana area).

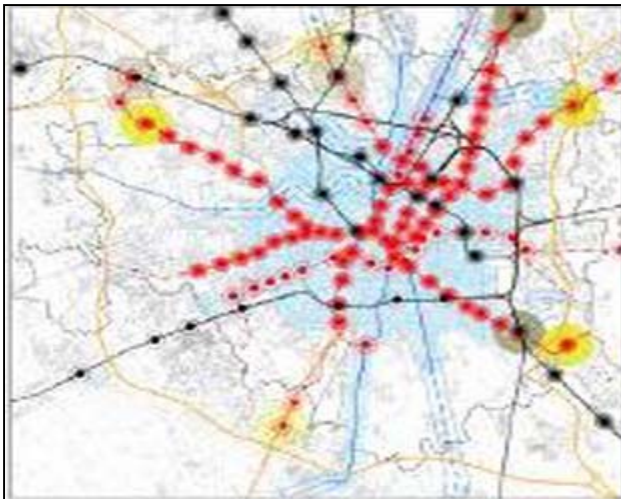
The radial structure of the infrastructure networks, the irregularity development connected to the localisation of the different urban functions in the Milan region, but also, a reorganisation of the metropolitan area with the new headquarters of Milano Trade Fair in Rho-Pero, the services and commercial polarities in Sesto San Giovanni, the reusing of the ex-Alfa Romeo in Arese, the new universities in Bovisa and Bicocca, the Montecity Rogoredo congress centre in the suburbs of Milano and many other programs in the north of the Milano, turn the priority in order to satisfy the needs relating to increasing mobility.

**Figure 1.10.8** - Public transport accessibility (with underground stations, railway stations and passante ferroviario stations) in Milano city town



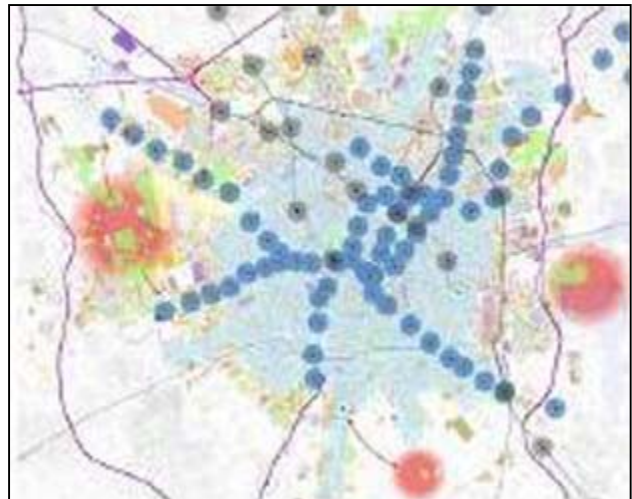
Source: Comune di Milano, 2005.

**Figure 1.10.9** - Criteria for localize the new activities in Milano



Source: Comune di Milano, 2005.

**Figure 1.10.10** - Criteria for localize the new public services in Milano



Source: Comune di Milano, 2005.

The road system and the transport policies in the Milan region establish a set of interventions which can improve the accessibility in territories in which the settling dynamics, the mobility practices, the previous infrastructure deficit and the weak qualities of the existing infrastructures can be an important bounds of development (as well as Brianza, and Pedemontana area), but also amplify the effect of the available investments, in accordance with the land-use policies, assuring the congruence with the infrastructure offer and verifying the capacity of existing infrastructures (PTCP Province of Milano).

In this direction the planning policies of the municipality of Milano try to direct: the *Piano per il governo del territorio* (PGT, under construction) of Milano city town, through analysis of the mobility system, of the implementation of mobility planning programs (POP, PUM PGTU), and of infrastructure projects, is going to define criteria for planning new services and new activities in congruence with the multimodal accessibility levels.

Even if at the *local accessibility scale*, the infrastructure network morphology (roads, railways and public transport network), privileges the central urban area and some urban axis (especially in the north), the settling scenery for the new functions and for the public services (Figure) purposes a multipolar new localisations in which the multimodal accessibility improves the access from the metropolitan area, decongesting the city centre.

### 1.10.3. On-going and recently completed infrastructure projects (costs, type of financing, actors)

The policies regarding the road system and the transport in the Province of Milano establish a set of interventions which can improve the access to the multipolar structure of the Milan region and which satisfy the need of “transversal” relations for the region, especially in the Northern area (the polycentric conurbations of Brianza, the reticular urbanisation of the Saronnese and the Vimercatese where many technological companies have settled during the 90s).

The accessibility within the region will be improved but there are still bottlenecks and certain routes that if developed would improve the accessibility considerably.

Some of the most important **roads** projects are (figure):

- the Pedemontana Road System (Sistema viabilistico pedemontano), an integrated system of infrastructures that crosses 5 provinces and about 100 municipal districts in the northern area of Milano and which is constituted by a motorway axis from Busto Arsizio (Varese Province) to Osio Sotto (Bergamo Province);
- the new four-lane motorway Boffalora-Malpensa which will improve the access from the south-west of Milan Province to the Malpensa airport;
- the creation of the four lane in the A4 motorway between Milano and Bergamo;
- the Bre.Be.Mi. Project, a new motorway that crosses the provinces of Brescia, Bergamo and Milano which was proposed in 1994 by the Camera di Commercio (Chambers of Commerce) of those provinces, in order to solve the serious problem of congestion. A specific society has been created – Bre.Be.Mi spa – to promote, plan, build and manage this motorway junction and all the roads connected to it;
- the Milanese east-external ring-road from Melegnano to Vimercate, where it is supposed also to begin the Bre.Be.Mi motorway. A specific society has been created to plan and realize this new ring-road: Tem spa - Tangenziali esterne milanesi spa –delivered up in February 2002 between Milan-Serravalle and Autostrade, Intesa Bci, Autostrada Torino-Milano and Bre.Be.Mi; currently share quota 15% has entered to make part of the TEM spa also the Province of Milan with one.

Some of these projects have been and still **are questioned**, because some municipal districts do not agree with their realisation, not for their utility (with try to stop congestion; to satisfy new mobility practices), but, above all, for the technical performances of the new road projects. These projects are often “big

works” (motorways, high speed roads...) for the long-distances accessibility, that they can not provide a sustainable and convincing answer to the heterogeneous mobility (local, regional, interregional mobility) that characterised this territory.

About the **railway network**, the new projects improve the international connexions (Milano is now the cross-road of 4 important European infrastructure corridors after the revision process of the Trans European Networks-TEN policy), as well as works improving the local networks and the accessibility to the public transport in Milan region.

Between the strategic international railway connexions:

- high railway speed Novara-Milano and Milano-Verona in the TEN priority corridors (n.5);
- the new Gottardo Axis (Chiasso-Como- Seregno-Monza and Seregno-Bergamo) which will improve the carriage of goods by rail to the north of Europe and to the Switzerland, according to the reorganisation of the rail trade and the logistic in Lombardia region;
- the third railway pass on the Milano-Genova railway line;

To improve the metropolitan railway networks:

- completion of the railway interconnection (national and regional railway lines connexion), in the north of Milan Region, from Novara to Bergamo;
- improving of the railway node of Milano, bringing to an end the Passante Ferroviario railway line to Milano-Rogoredo station in the south of Milano .

About the **public transport projects**, some of the most important public transport projects, with financing, are:

- new underground line MM4 Linate Airport-Lorenteggio;
- new underground line MM5 Garibaldi-Cà Granda;
- new tramway Milano-Cinisello Balsamo;
- prolongation of a M3 underground line Maciachini-Comasina;
- prolongation of a M2 underground line Famagosta-Assago Milanofiori;
- prolongation of a M1 underground line Molino Dorino-Pero-Rho SFR/AV.

**Table 1.10.4 - The most important roads projects in the Milan Region**

Main roads projects	Type	km	Project implementation	Costs	Type of financing	Actors*
The Pedemontana Road System	Motorway	67 km	Approved and published second preliminary plan from Anas	4.300 ml euro	2.600 ml euro Public financing 1.700 ml euro Project Financing	Pedemontana spa
The Boffalora-Malpensa motorway	Motorway	18,6 km	Under construction	216,396 ml euro	180,796 ml euro National financing 35,636 ml euro Regional financing	ANAS, SEA, Regione Lombardia
The Milanese east-external ring-road	Motorway	40 km	Approved preliminary plan from Regione Lombardia	1.742 ml euro	364 ml euro Public financing 1.378 ml euro Project Financing	TEM spa <sup>18</sup> (Tangenziali Esterne di Milano spa)
The Bre.Be.Mi. Project	Motorway	49,3 km	Introduced preliminary plan to the Cipe	981.268.108,27 euro	Project Financing	Brebemi spa

\* Actors: who promotes, plans, builds and manages the project

<sup>18</sup> The TEM spa (Tangenziali Esterne di Milano Spa) have been delivered up in February 2002 between Milan-Serravalle and Autostrade (32% rate per head), Intesa Bci (20 %), Autostrada Torino-Milano and Brebemi (8% for each). Currently share quota 15% has entered to make part of the TEM spa also the Province of Milan with one. The goal of the Tem spa is promoting the planning and the Milanese east-external ring-road realization, inserted in program CIPE of the strategic participations of national interest ("Legge Obiettivo").



**Table 1.10.5 - The most important rail projects in the Milan Region**

Main rail projects	Type	Project implementation	Costs	Actors*
AC Torino-Milano	New high railway speed line	Under construction	6.800.000.000 euro (source: comitato Transpadana)	ISPA <sup>19</sup> , TAV, Italferr, RFI
AC Milano-Bologna-Roma	New high railway speed line	Under construction	6.159.000.000 euro Milano-Bologna (source: Tav spa)	ISPA, TAV, Italferr, RFI
AC Milano-Verona	New high railway speed line	Preliminary plan; Under construction only Treviglio-Pioltello link	4.720.000.000 euro (source: Tav spa)	ISPA, TAV, RFI, Italferr
AC Genova-Milano-Novara (Terzo Valico appenninico)	New high railway speed line	Preliminary plan	4.300.000.000 euro (source: comitato Transpadana)	ISPA, TAV, Rfi, Italferr
Gronda Nord-est - Gottardo railway interconnection project	Quadrupling Chiasso-Monza line	Preliminary plan	2.659.703.030 euro (source: Piano straordinario per lo sviluppo delle infrastrutture lombarde)	RFI, Italferr
Gronda Nord-est - Gottardo railway interconnection project	Seregno-Verdello new railway line	Preliminary plan		RFI, Italferr
Fnm Saronno-Seregno (Novara-Malpensa-Seregno railway line)	Rehabilitation railway line, with new stations	Executive plan	41.539.661 euro	FNM, Regione Lombardia, RFI
Railway line Milano-Mortara	Rehabilitation	Preliminary plan Abbiategrasso-Mortara, Executive plan Abbiategrasso-Milano link	105.426.000 euro	RFI, Regione Lombardia

**Table 1.10.6 - The most important public transport projects in the Milan Region**

Main public transport projects	Type	Km	Project implementation	Costs	Type of financing	Actors*
MM4 Linate - Lorenteggio	Underground with 14 stations	7 km	Executive plan	1.080 mil euro	Project finance	MM spa, Astaldi
MM5 Garibaldi - Cà Granda	Underground with 9 station	5,6 km	Executive plan	503.140.000 euro	Project finance	MM spa, Astaldi
Metrotranvia Milano-Cinisello Balsamo	Tramway with 27 stations	8,5 km	Under construction	65 mil euro (+ 55 mil euro means of transporting)	Public financing	MM spa, Regione Lombardia, Comune di Milano, Comune di Cinisello B.

#### 1.10.4. Are Infrastructure issues potential obstacles to the productivity of enterprises?

The delay to realize the infrastructure works from many time in project, deferred by the lack of the financing, by the complex procedures, by political and consensual nodes too, is an obstacle to the productivity of the enterprises and for the economical system in province of Milano and in Lombardia region too.

<sup>19</sup> From 1 January 2003, according to the "new financial plan" introduced from the National Financial Law 2003, it has been created the society "Infrastructures SPA" (ISPA). The new High speed railway line Torino-Milano-Napoli is financed from ISPA for a total amount until 25 billions of euro. ISPA - instituted with Law n° 112 of the 15 June 2002 with only shareholder Cassa Depositi e Prestiti - is constituted in order to finance great public works and "... the investments for the realization of the railway infrastructure for the High Speed system, also to the aim to reduce the quota depending from the State".

Assolombarda<sup>20</sup> denounces that the North-western infrastructure system is today in an heavy inefficiency and also, in many strategic areas, in a substantial collapse, curbing the economical and territorial development of the region (Rapporto OTI nord-ovest, 2005).

**The main problems**, frequently suggested by the Lombardy undertakers, deferring the infrastructure works, planning from many time, are procedural, financial and political questions.

For the **procedural** aspects, in spite of the simplification and acceleration in the decisional process introduced by Legge Obiettivo, a lot of infrastructure projects are stopped in the Ministerial offices (CIPE), or they have required modifications, with consequences in the approbatory iter. Between these projects:

- the railway connexion to Gottardo axis (quadrupling Chiasso-Seregno line and Seregno-Verdello line);
- the Milanese east-external ring-road, the Pedemontana Road System and the roads for the accessibility to the Milano Trade Fair in Rho-Pero for which the technical problems have creapy the iter, as well as, for the Milanese east-external ring-road and the Pedemontana Road System the financial aspects;
- the county roads as Rivoltana and Paullese, the road-link from Magenta to west ring-road in Milano, the new road of Sempione.

Considerable uncertainties in **financial disposability** for some projects, inserted in the Legge Obiettivo, remain; this is the case of:

- the new High speed railway line Milano-Verona without definitive project, for the uncertainties in financial availabilities;
- the Pedemontana Road System;
- the new road of Sempione;
- the Milanese east-external ring-road.

For the **political nodes**, in reference to consensual solutions with the local actors involved in the projects, Assolombarda remark that, in spite of the Legge Obiettivo expectations achieving consensual solutions between conflicting interests, for many road projects the strong oppositions and the local demands of important alterations in the project, remain with consequences in the slowing down of many infrastructure works. This is the case of:

- the rehabilitation project in the Railway line Milano-Mortara;
- the rehabilitation of the railway node of Castellanza;
- the Bre.Be.Mi. motorway Project Milano-Brescia;
- the Milanese east-external ring-road;
- the road-link from Magenta to the west ring-road in Milano;
- the Pedemontana Road System;
- the new road of Sempione.

In relation with the delay and the uncertainty in the implementation of the main infrastructure projects, important for the economical development, the Assolombarda<sup>21</sup> advises as **main aims**:

- improve the multimodal integration between different transport systems;
- decongested the urban metropolitan area, realizing the suburban intermodal nodes, for re-assign the traffic flows;
- circumscribe the environmental impacts of new projects;
- re-organize the logistic system.

In this context, the **expectations** of Assolombarda for the Lombardia area are:

- the start of the works for the railway lines Milano-Mortara, Novara-Malpensa, and Castellanza railway

---

<sup>20</sup> Assolombarda is the association of industrial and service companies in the Milan metropolitan area.

<sup>21</sup> Assolombarda, *Sviluppo delle infrastrutture e costruzione del consenso*, Mobility conference 2005, Milano 19 gennaio.



- node;
- the approbation of the definitive projects for Terzo Valico in the high speed railway Genova-Milano-Novara, as well as for the high speed railway Milano-Verona;
- an acceleration in the high speed railway line Torino-Lione;
- the conclusion of the procedural iter for Bre.Be.Mi motorway, Milanese east-external ring-road, Pedemontana Road System and also for the railway connexion to Gottardo axis (quadrupling Chiasso-Seregno line and Seregno-Verdello line);
- improve the quality of the nodes project (road, motorways and railway junctions) and of the works for the road accessibility to Milano Trade Fair in Rho-Pero.

#### 1.10.5. Information technology

This section of the paper describes the state of information technology, in particular the broadband connections, in the Milano area.

Broadband definition is widely discussed at the international level; the debate focuses both on bandwidth in terms of transmission capacity (Kb/sec) and type of services provided. The Task force on broadband communications, an Interministerial Committee established by the Italian Minister of Communications and the Minister for Innovation and Technologies in 2001 adopted the following definition: broadband communications refer to the technological environment that permits the use of digital technologies at maximum levels of interactivity. The technological environment consists of applications, content, services and infrastructure.

The optic fibre backbone is shown in the following figure. The red lines constitute the main structure of information technology infrastructures in the Milano area. From the backbone originate the connections with final users.

Figure 1.10.11 - Backbones in the Provincia of Milano



Source: Osservatorio Banda Larga, 2003.

Broadband technology consists in high speed data transferring systems to inhabitants and enterprises such as, for terrestrial transmission methods, optic fibre and ADSL.

The Milano area is, in general, well covered by broadband infrastructures.

#### 1.10.5.1 Capillary optic fibre connection

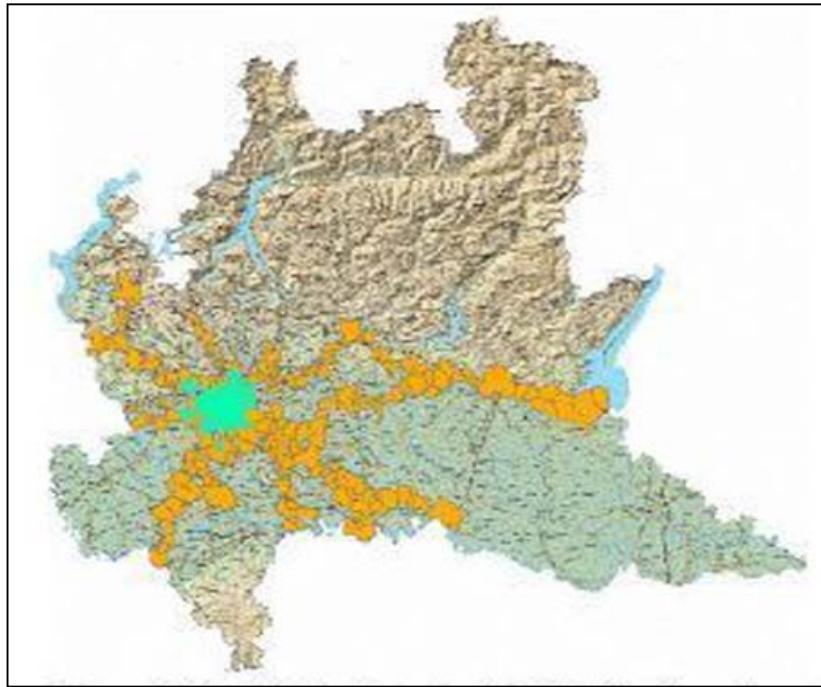
Fastweb, an e-Biscom group's society, provides a terrestrial connection at a transmission capacity of 10 Mb/sec, which guarantees advanced application for enterprises and residential customers. Main services consist in data and phone communications, video on demand, video communications.

The total length of fibre information technology infrastructures at the beginning of 2004 was 3533 km, corresponding to 350.000 km cables posed by the 18 operators who signed the convention with the Milano municipality for the realization of the terrestrial infrastructure.

The installed infrastructure is highly diffused in Milano in terms of streets (68.5%, i.e. 3084 streets), buildings (58%, i.e. 26.000 buildings) and apartments (80%, i.e. 600.000 apartments).

For this reason Milano is the most cabled Italian city and one of the European cities with widest optic fibre diffusion in relation to the number of inhabitants. This situation permits to attract enterprises able to provide advanced technology services and to develop new professions in technology related fields and applications.

**Figure 1.10.12** - Map showing the distribution of municipalities with backbones and with high capillarity of the Fastweb network



Source: Regione Lombardia.

In the province of Milano the service is almost absent except for the municipalities surrounding Milano: Assago, Buccinasco, Corsico, Basiglio, Cusago, Rho, Bresso, Cinisello Balsamo, Sesto San Giovanni, Cologno Monzese, Vimodrone, Segrate, San Donato Milanese.

**Figure 1.10.13** - Municipalities with high capillarity of the Fastweb network

Source: Regione Lombardia.

#### 1.10.5.2 CDN – Direct Numeric Circuits

CDN are dedicated lines, based on optic fibre technologies, which the user can rent from the provider paying a monthly fee. They offer a permanent internet connection at various capacity (from medium < 2 Mbit/sec to high 2.5 Gbit/sec). The limiting factor of this application is the cost, which is higher than for the other connection techniques and depends from the requested capacity and from the distance of the costumer to the closer node of the backbone. This is mainly indicated for activities which exchange high entities of data: universities, institutions, association, enterprises which need an high grade connectivity and which provide advanced information technology services.

The diffusion of this kind of connection is high in the Milano area.

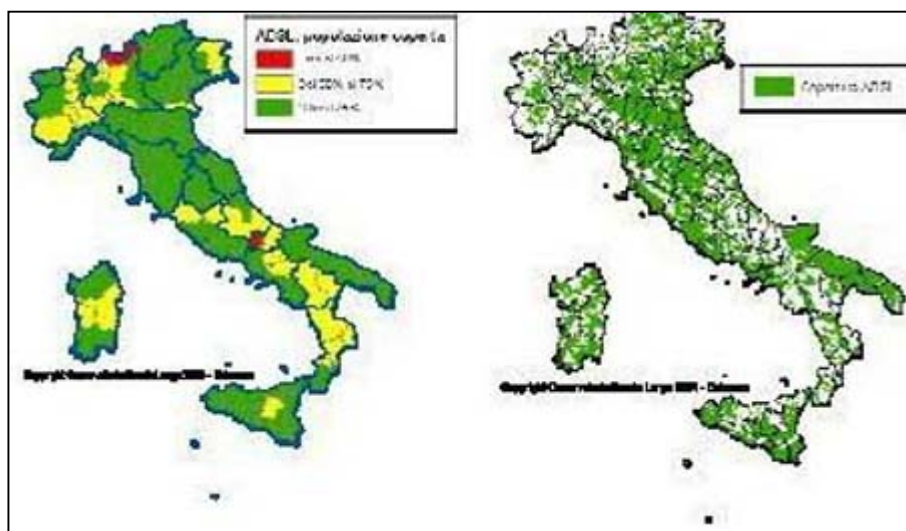
#### 1.10.5.3 ADSL

ADSL (Asymmetrical Digital Subscriber Line) is the standard for digital communication which uses the traditional phone network, getting two communications channels: one for vocal traffic and one for data. The transmission capacity, offered by the main providers, change from 640 kb/sec to 2 Mb/sec. This technology, based on the phone network, is able to offer network services to residential users in the most part of the Milano province.

More than the 75% of inhabitants of the Provincia are reached by Adsl service, provided by 31 information technology societies at the end of 2004.

In general the ADSL transmission capacity is inadequate to interactive internet added values services such as e-commerce, e-learning, e-banking, multimedia contents, which require major capacity of the network.

Figure 1.10.14 - Adsl coverage in the Italian Provinces



Source: Osservatorio Banda Larga, 2003.

For the Provincia and Regione institutions broadband diffusion is a primary objective of economical policy. A program for the realization of pilot projects for Information Technology diffusion has been recently promoted by the Lombardia region.

The municipalities which belong to Objective 2 and Phasing Out areas in the Lombardia region (25 of them are located in the Milano Province) can receive financing to provide broadband connectivity to inhabitants and, in particular to local institutions in order to promote e-government forms.

Investments for 200 Million of euro are also planned in order to reduce the digital divide within the Lombardia Region and to increase the number of inhabitants and enterprises reached by optic fibre connections.

## References

- Assolombarda, Unione Industriale di Torino, Assindustria Genova, *Osservatorio territoriale infrastrutture nordovest, Rapporto 2004*, gennaio 2004.
- Assolombarda, *Sviluppo delle infrastrutture e costruzione del consenso*, Mobility conference 2005, Milano 19 gennaio.
- AMA, *Relazione sullo stato dell'ambiente del Comune di Milano*, ottobre 2003.
- Comune di Milano, AMA, *Piano Urbano della Mobilità*, Milano.
- Comune di Milano, *Piano Generale del traffico urbano*, AMA, Milano 2003.
- Espo project 1.2.1. "Transport services and networks: territorial trends and basic supply of infrastructure for territorial cohesion", UE Research, 2004.
- Provincia di Milano, *Piano Territoriale di Coordinamento Provinciale*, 2002 (adottato).
- Provincia di Milano, *Mobilità e territorio. Dinamiche attuali e obiettivi di integrazione del PTCP*, Quaderni del Piano territoriale n. 21, Guerini Associati, Milano, 2003.
- Regione Lombardia, *Piano del sistema dell'intermodalità e della logistica in Lombardia*, 1998.
- Regione Lombardia, *Linee generali di assetto del territorio*, Del. GR 7/4/2000.
- Regione Lombardia-Irer, *Infrastrutture per la competitività: uno studio comparativo tra le quattro regioni motori d'Europa*, Milano, Ottobre 2002.

## **Websites**

- [www.ama-mi.it](http://www.ama-mi.it)
- [www.atm-mi.it](http://www.atm-mi.it)
- [www.infrastrutturetrasporti.it](http://www.infrastrutturetrasporti.it)
- [www.lom.camcom.it](http://www.lom.camcom.it)
- [www.mi.camcom.it](http://www.mi.camcom.it)
- [www.otinordovest.it](http://www.otinordovest.it)
- [www.provincia.milano.it](http://www.provincia.milano.it)
- [www.sea-aeroportimilano.it](http://www.sea-aeroportimilano.it)
- [www.sacbo.it](http://www.sacbo.it)
- [www.trasporti.regione.lombardia.it](http://www.trasporti.regione.lombardia.it)
- [www.osservatoriobandalarga.it](http://www.osservatoriobandalarga.it)
- [www.ors.regione.lombardia.it](http://www.ors.regione.lombardia.it)



## 1.11. CULTURAL AND NATURAL AMENITIES

Milan is the heart of Italy's largest metropolitan area, an urban region counting a population of over 3,5 millions where the country's most complex productive and strategic functions concentrate.

However competitiveness could no longer be judged just on the basis of economic element (domestic product, job market, infrastructures,...); today, competitiveness is conditioned by a multitude of interacting qualitative factors, such as the endowment of intangible and relational assets (the *milieu* effect), the local supply of major functions (cultural centres, entertainment centres, sports facilities, green areas,...) and the quality of life.

In this sense, sustainable planning and management of province area are the principal strategic factors that determine local competitiveness and attractiveness.

Even if with slight delay, the public administrations (local, provincial, regional) in the provincial territory have also accepted this problem and challenge, beginning to promote the existing cultural and natural amenities.

### 1.11.1. Cultural amenities and main attractions

In the province of Milan, major functions, especially for cultural and natural heritage, are characterised by their low frequency in the area and high quality standard: they play a strategic role in the whole metropolitan area, with positive effect on attractiveness of the province.

The high concentration of rare and prestigious functions is mostly evident in the city core: it's the cultural system to show high density particularly in the city centre, while the outlying areas are most endowed with natural amenities.

Some of the amenities located in the city are outstanding cultural centres.

The Duomo, which traditionally symbolizes the city of Milan, is the most extraordinary example of Italian late Gothic art. It ranks third in terms of dimension after the Saint Peter's Basilica at the Vatican in Rome and Seville's Cathedral. Located in the very heart of the city it represents both the core of the city and the unavoidable destination of countless visitors from Italy and abroad.

In the city core there are ten churches that could be ranked listed buildings: the Basilica founded in 380 of Sant'Ambrogio, patron Saint of Milan, is a fine example of the Romanesque-Lombard churches.

The Castello Sforzesco was built for purely defensive reasons by Galeazzo II Visconti around 1368; its reconstruction was carried out by the famous architect Luca Beltrami who, starting in 1893, brought the Castello back to its former model.

The Scala Theatre is one of the best known temples of lyric and classical music in the world, thanks to its history, acoustics and the outstanding level of its performances.

There is one UNESCO World Heritage sites in the Milan area: the *Cenacolo Vinciano* (Leonardo da Vinci's "Last Supper") one of the world's most celebrated art creations located in the domenicane convent adjoining the church of Santa Maria delle Grazie.

There are also numerous art galleries and museums, such as the Pinacoteca di Brera Gallery - housing one of Italy's most important art collections, the Villa Reale and Civica Galleria d'Arte Moderna - featuring masterpieces by famous artists, such as Grassi, Matisse and Picasso, Palazzo Bagatti-Valsecchi - considered to be one of the finest museums in the whole of Europe, with many outstanding displays and collections.

On the whole, cultural facilities, in the metropolitan area, are relatively modest in number and overfilled in a small space, but they will be probably increased by some planned projects: the Ansaldo- City of Cultures centre (Porta Genova, Milan) and the European Library. Also, the current inadequacy of conferences centres, which fails to respond to all size range needs, is reducing opportunities for business

tourism; the construction of the new Conference Centre in Montecity area, to be served by a new underground line, will partly solve this problem.

One of the highly prestigious rare functions with a large international appeal is the trade fair centre in Portello Fiera. In 2005, the existing urban centre will be expanded with the addition of the new Pero-Rho centre, located in the north western sector of the province. The city's historical trade centre will soon be abandoned, and its valuable area will be available for new projects, such as the Museum of Design.

Finally, the main sports and entertainment facilities (San Siro Stadium, Hippodrome, Palalido, Acquatic centre) are located in the city's western portion, which has been the area specialising in sports facilities since the 30's.

The province cultural supply and activity level is indicated by the cultural institutions which are listed in the table below.

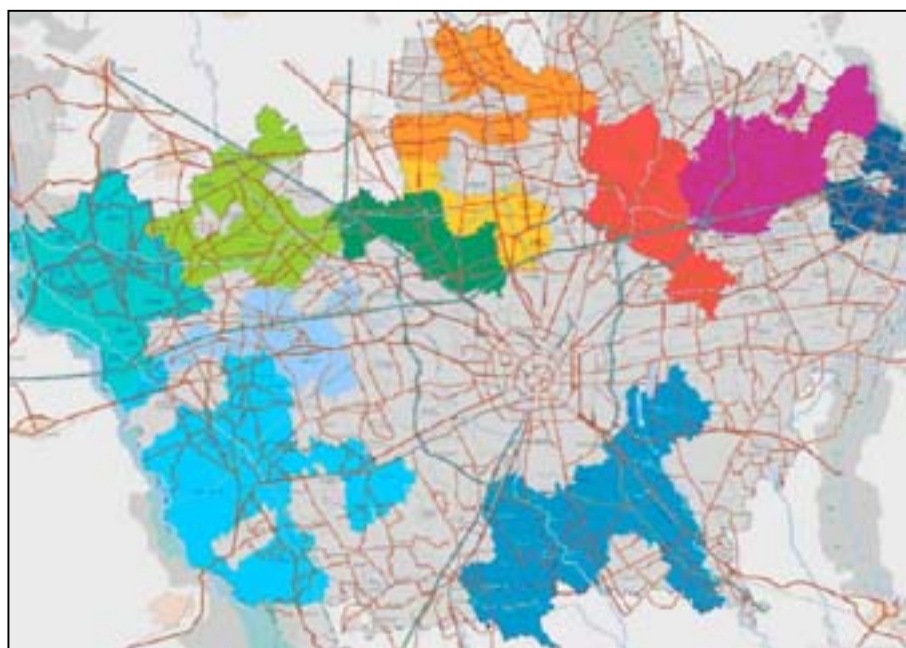
**Table 1.11.1** – Cultural amenities by Province, 2001. Italy, Lombardia Region, Provinces

Provinces	Theatres	Cinemas	Museums	Public libraries
	Palys	N.	N.	N.
Varese	1.437	79	43	101
Como	750	62	19	110
Sondrio	252	17	17	41
<b>Milano (city)</b>			<b>31</b>	
<b>Milano</b>	<b>11.526</b>	<b>330</b>	<b>24</b>	<b>179</b>
Bergamo	1.669	131	43	212
Brescia	1.523	151	44	180
Pavia	706	29	19	89
Cremona	550	25	25	101
Mantova	790	56	30	62
Lecco	451	43	11	67
Lodi	202	27	10	48
<b>Lombardia</b>	<b>19.856</b>	<b>950</b>	<b>313</b>	<b>1.190</b>
<b>Italia</b>	<b>123.610</b>	<b>4.911</b>		

Source: Annual of statistic Lombardia Region, 2004.

The Province of Milan has launched, in 1995, the cultural initiative “Metropoli project”, aimed to promote the local resources through the involvement of the local administrations.

The project is organized in twelve cultural centres of attraction, distributed in the provincial territory (see the figure below). The initiative fosters a schedule of events related to music, dancing, street theatre, cinema, arts: all these events take place in many country houses, monasteries, abbey, churches, castles and surrounding parks situated in the hinterland of Milan.

**Figure 1.11.1 – Cultural Centres in the Province of Milan (Metropoli Project)**

Cultural Centre “Castanese”	Centre “Insieme Groane”	Centre “Valle del Seveso”	Centre “Vimercatese”
Centre “Le Filande”	Centre “ScenAperta”	Jazz Centre “Monza e Brianza”	Centre “Adda”
Centre “Navigli”	Centre “Parchi e Ville”	Centre “Rocche Castelli Abbazie”	

### 1.11.2. Natural amenities

In the Province of Milan there are seven regional parks that account for 36,23% of the total provincial area: Parco delle Groane, Parco Nord Milano, Parco Agricolo Sud Milano, Parco Lambro, Parco Brughiera, Parco Adda Nord, Parco Valle del Ticino.

The last one has been designed Biosphere Reserve from the UNESCO’s Programme on Man and the Biosphere (MAB). The Park is a ‘riverscape’ biosphere reserve along the Ticino River in the north of Italy, situated at the meeting place of the culturally rich regions Lombardy and Piedmont. It represents an important ecological corridor within the urbanized and industrialized Po plain. The site encompasses a mosaic of ecosystems with large river habitats, wetlands, riparian woods and patches of primary plain forest which covered the entire valley during Roman colonization. At the same time, the area is characterized by its traditional rural landscape with semi-natural ecosystems with paddy rice, cornfields, permanent grasslands and ‘marcita’ (water-meadow).

The “Parco Agricolo Sud Milano” accounts for 23,1% of the total Milan land area (42.03 km<sup>2</sup>) and touches about 60 different municipalities. The Province of Milan is the administrator body of the Park: the management of the area aims at calibrating economic activities so that the conservation of this cultural landscape with its rich history is ensured in cooperation with local communities. Rural communities are hoped to benefit from increased sustainable uses of the area such as ecotourism and recreational activities, environmental education and training.

Apart from the regional parks, the Province of Milan has some nature reserves and protected areas; in particular there are six local parks (PLIS) extended over several municipalities (Table 1.11.2).



**Table 1.11.2 – Parks and protected areas in the province of Milan, 2001**

	Area/Total provincial area	Area/Urbanized area	Typology
Parco delle Groane	1,44 %	3,96 %	Regional Park
Parco Nord Milano	0,09 %	0,25 %	Regional Park
Parco Lombardo della Valle del Ticino	10,07 %	27,74 %	Regional Park
Parco Valle del Lambro	1,35 %	3,72 %	Regional Park
Parco Agricolo Sud Milano	21,68 %	59,71 %	Regional Park
Parco della Brughiera	0,26 %	0,71 %	Regional Park
Parco Adda Nord	1,34 %	3,68 %	Regional Park
Fontanile Nuovo		5,50E-10	Nature reserve
Sorgenti della Muzzetta		1,89E-09	Nature reserve
Bosco di Vanzago		2,68E-09	Nature reserve
Parco Alto Milanese		2,47E-09	PLIS (local parks)
Parco del Bosco di Legnano		2,29E-10	PLIS
Parco del Molgora		7,95E-09	PLIS
Parco del Roccio		2,07E-08	PLIS
Parco Grugnotorto Villoresi		2,08E-10	PLIS
Parco Rio Vallone		6,78E-09	PLIS
<b>Province of Milan</b>	<b>36,23 %</b>		

Source: Annual of statistic Lombardia Region (2004).

The following link shows the map of all parks and nature reserves in the provincial area: <http://temi.provincia.milano.it/agricolturaeparchi/cartina.htm>.

The city's parks, including both the historical central parks and the parks in the urban circle, incorporate almost 600 ha of green areas, covering only a modest portion of the urbanised land, around 10%. The ten square metre supply services per resident is below the minimum required by the Italian law and far below the European mean law.

On the other hand, if we consider the forthcoming parks planned in the major transformation projects, the city will soon reach 1,750 ha of parkland. Besides that, we should consider small to medium sized landscaped green areas in various neighbourhoods, which help to add environmental quality to the city, and, above all, the city's wide green belt granted by Parco Agricolo Sud and Parco Nord.

### 1.11.3. Tourism

Milan is the primary destination for Italian and foreign tourists in the Lombardia Region, but the average journey time in the province of Milan is just 2,4 (days/year).

Most of tourists arrive in Milan for business or special events. The commercial metropolis of Milan is home to many important business centres, financial institutions and Italy's stock market. Milan is also known throughout the world for its leading high fashion and design excellence.

Tourist are attracted by two main attractions: Fiera di Milano and fashion shows. Since 1985, the Milan Trade Fair has become an important exhibition centre, one of the leading facilities in Europe, and now hosts a large number of specialist international shows. Each year the Fiera di Milano attracts almost 3 million visitors and over 30,000 exhibitors.

Throughout the year in Milan there are many important fashion shows, where the latest collections go on show. One of the most famous streets in Milan is Via Montenapoleone, where many of the world's leading Italian and international fashion designers are concentrated.

In the region there are many other tourist centres, known through the world, tanks to natural landscapes, such as lakes, valleys and national parks (Parco dello Stelvio, in the province of Sondrio). Nearby Milan there are several large lakes (Como, Garda, Maggiore), with excellent facilities for visitors, including

hotels, restaurants and cafes, lining the lakes fronts. There are also some very pretty villages, castles, museums, villas and gardens dotted along the lake shores.

In terms of tourist facilities, the provinces of Brescia and Sondrio are more developed than Milan, but the number of visitors is still higher in metropolitan area (Table 1.11.3).

**Table 1.11.3 – Tourist sector, 2002. Italy, Lombardia region, Provinces**

	Milano	Bergamo	Brescia	Como	Cremona	Lecco	Lodi	Mantova	Pavia	Sondrio	Varese	Lombardia	Italia
Hotels (number)	607	284	741	257	37	97	24	94	129	401	157	2.828	33.411
- N° beds	61.873	11.317	32.466	12.272	1.625	3.227	1.227	2.911	4.323	19.269	6.591	157.101	1.929.544
- Italian tourists (days)	5.098.911	795.258	1.884.406	317.341	170.430	167.563	182.405	320.234	353.291	1.291.254	451.242	11.032.335	133.295.056
- Foreign tourist (days)	4.575.640	309.554	2.461.687	731.563	60.426	116.142	32.642	89.652	88.314	549.144	365.538	9.380.302	97.837.167
- Total (days)	9.674.551	1.104.812	4.346.093	1.048.904	230.856	283.705	215.047	409.886	441.605	1.840.398	816.780	20.412.637	231.132.223
- Days/n° beds * 365	0,43	0,27	0,37	0,23	0,39	0,24	0,48	0,39	0,28	0,26	0,34	0,36	0,33
Other facilities (number)	25	44	398	51	15	56	1	55	17	234	14	910	75.966
- N° beds	4.026	6.714	55.711	13.227	376	3.410	13	729	1.103	9.040	4.746	99.095	2.150.643
- Italian tourists (days)	455.241	247.517	1.300.562	74.164	18.464	144.257	-	40.373	24.744	175.303	126.442	2.607.067	66.392.064
- Foreign tourist (days)	69.960	32.909	1.943.445	271.650	8.383	35.398	-	9.430	6.237	111.411	97.282	2.586.105	47.722.763
- Total (days)	525.201	280.426	3.244.007	345.814	26.847	179.655	-	49.803	30.981	286.714	223.724	5.193.172	114.114.827
- Days/n° beds * 365	0,36	0,11	0,16	0,07	0,2	0,14	-	0,19	0,08	0,09	0,13	0,14	0,15
Total (number)	632	328	1.139	308	52	153	25	149	146	635	171	3.738	109.377
- N° beds	65.899	18.031	88.177	25.499	2.001	6.637	1.240	3.640	5.426	28.309	11.337	256.196	4.080.187
- Italian tourists (days)	5.554.152	1.042.775	3.184.968	391.505	188.894	311.820	182.405	360.607	378.035	1.466.557	577.684	13.639.402	199.687.120
- Foreign tourist (days)	4.645.600	342.463	4.405.132	1.003.213	68.809	151.540	32.642	99.082	94.551	660.555	462.820	11.966.407	145.559.930
- Total (days)	10.199.752	1.385.238	7.590.100	1.394.718	257.703	463.360	215.047	459.689	472.586	2.127.112	1.040.504	25.605.809	345.247.050

Source: Istat.

## 1.11.4. Sustainable development

### 1.11.4.1 Waste

The waste management problem is one of relevant issues in metropolitan areas, such as Milan, where high population density and urbanisation amplify the consumption factor.

Municipal solid waste production, expressed in tons per year, has increased since 1999 in all the provinces. A useful indicator for comparing waste production in different areas is per capita production, expressed in kg/(inhabitant\*year). In the province of Milan, per capita production doesn't exceed the regional average and the separate collection percentage is increasing.

These data confirm the effectiveness of political and practical initiatives aimed at reducing the environmental pressure consequent to municipal solid waste production.

**Table 1.11.4 – Waste production and separated collection in Lombardia, by province, 1999**

	Population	Total waste (t/y)	Daily per capita production (kg/ab*g)	Separate collection (t/y)	Waste separation/ Total waste %
Varese	815,930	382,973	1.29	130,682.01	34.1
Como	539,820	236,455	1.20	71,410.79	30.2
Sondrio	178,179	67,811	1.04	17,711.31	26.1
<b>Milano</b>	<b>3,799,657</b>	<b>1,797,739</b>	<b>1.30</b>	<b>679,254.94</b>	<b>37.8</b>
Bergamo	970,051	387,753	1.10	173,173.96	45.4
Brescia	1,103,368	590,434	1.47	135,315.92	22.9
Pavia	494,723	248,619	1.38	46,729.62	18.8
Cremona	334,317	174,393	1.43	55,308.79	31.7
Mantova	374,008	187,880	1.38	49,944.04	26.6
Lecco	311,017	137,392	1.21	63,178.35	46.0
Lodi	195,670	88,807	1.24	30,533.46	34.4
<b>Lombardia</b>	<b>9,166,741</b>	<b>4,300,257.5</b>	<b>1.29</b>	<b>1,456,243.18</b>	<b>33.9</b>

Source: Waste Watch (Lombardia Region).

**Table 1.11.5** - Waste production and separated collection in Lombardia, by province, 2003

	Population	Total waste (t/y)	Daily per capita production (kg/ab*g)	Separate collection (t/y)	Waste separation/ Total waste %
Varese	834,553	398,456	1.31	178,310.00	44.8
Como	553,494	261,248	1.29	89,951.29	34.4
Sondrio	178,625	74,751	1.15	24,468.96	32.7
<b>Milano</b>	<b>3,809,816</b>	<b>1,891,859</b>	<b>1.36</b>	<b>766,581.93</b>	<b>40.5</b>
Bergamo	1,004,605	439,580	1.20	211,055.49	48.0
Brescia	1,150,810	670,966	1.60	214,810.07	32.0
Pavia	507,694	268,774	1.45	60,755.34	22.6
Cremona	342,921	167,577	1.34	83,536.14	49.8
Mantova	385,921	201,911	1.43	69,771.70	34.6
Lecco	318,350	147,601	1.27	81,454.84	55.2
Lodi	205,089	92,810	1.24	41,935.40	45.2
<b>Lombardia</b>	<b>9,291,878</b>	<b>4,615,534.3</b>	<b>1.36</b>	<b>1,822,631.15</b>	<b>39.5</b>

Source: Waste Watch (Lombardia Region).

#### 1.11.4.2 Air quality

The air quality improvement is perceived as one of the top priority environmental issues in the city; the growing interest in this area, also raised by the Kyoto Protocol approval, is a symptom of the increased awareness of the risks linked with urban development and mass vehicle use, but is also a signal of the need for urgent corrective measures in metropolitan system which is required to respond to a variety of growing needs in one of Europe's most advanced urban and suburban contexts.

Air quality in the province of Milan has improved progressively over the past few years in terms of the main pollutants; the trend in atmospheric concentrations of traditional pollutants (CO, NO<sub>x</sub>, SO<sub>2</sub>) has decreased. On the other hand, concentrations of fine particulate (PM<sub>10</sub>) and ozone (O<sub>3</sub>) are a serious cause of concern.

In the case of PM<sub>10</sub>, monitored since 1998, daily average concentrations exceed the legal limit over a number of times higher than permitted by legislation, resulting in restrictions on vehicle traffic. Fine particulate concentrations are high in winter when traffic admissions are augmented by emissions from stationary sources (heating system), while ozone exceed legal levels especially in the summer. Reducing of concentrations of these recently emerging pollutants is the key to solving problems link to atmospheric pollution.

**Table 1.11.6** – Air Pollutants in the province of Milan, 2003

	Province of Milan	Provincial Average	Milan (city)	Milan/Total
Emissions PM <sub>10</sub> (ton/y)	3,191.5	17.1	779.0	24.4%
Emissions CO <sub>2</sub> (ton/y)	24,366,144.6	130,300.2	6,840,951.4	28.1%
Emissions NO <sub>x</sub> (ton/y)	56,133.0	300.2	13,158.2	23.4%
Emissions CO (ton/y)	256,413	1,371.2	71,071	27.7%

Source: Environmental Informative System, Province of Milan.

#### 1.11.4.3 Energy

The province of Milan represents about half of total electric energy consumption for household use in the region; in terms of per capita consumption, Milan exceeds the regional and national average.

Per capita fuel consumption for private vehicles is roughly the same for all provinces, but the number of

vehicles for 1000 inhabitants in Milan is rather high (see Table 1.11.7).

The transportation sector is considered strategic in policies for energy savings and greenhouse gas emission reduction due to sharp growth in consumption registered all over Europe.

Initiatives promoting increased use of alternative means of transportation and clean fuels include incentives for the purchase of electrical motorbikes, payment of contributions to vehicle owners who install new natural gas or LPG systems in compliance with safety regulations, and introduction of electrical vehicles fleets at park-and-ride lots. Special attention has also been paid to fuelling station distribution through the construction of public recharging points for electrical vehicles and expansion of the natural gas fuel distribution network.

**Table 1.11.7 – Energy consumption by province, 2002**

		Bergamo	Brescia	Como	Cremona	Lecco	Lodi	Mantova	Milano	Pavia	Sondrio	Varese	Lombardia	Italia
Electric energy domestic consumption	Milion Kwh 2002	1.028	1.310	591	365	338	204	446	<b>4.630</b>	565	199	891	<b>10.568</b>	<b>62.958</b>
Per capita consumption	Kwh 2002	1.042	1.163	1.087	1.078	1.073	1.011	1.171	<b>1.244</b>	1.137	1.118	1.088	<b>1.160</b>	<b>1.098</b>
Petrol consumption	Tons 2002	265.678	352.637	166.923	88.510	83.035	54.555	139.166	<b>1.114.409</b>	139.408	55.850	250.211	<b>2.710.382</b>	<b>16.052.884</b>
- per capita	Tons 2005	0.27	0.31	0.31	0.26	0.26	0.27	0.36	<b>0.3</b>	0.28	0.31	0.31	<b>0.3</b>	<b>0.28</b>
- petrol consumption/n° cars	Tons 2002	0.48	0.54	0.51	0.47	0.46	0.5	0.61	<b>0.49</b>	0.47	0.58	0.49	<b>0.5</b>	<b>0.48</b>
Number of cars	v.a. 2002	550.584	658.897	328.271	188.993	180.976	108.992	228.654	<b>2.284.512</b>	297.404	96.284	513.614	<b>5.437.181</b>	<b>33.706.153</b>
- cars for 1000 inhabitants	Indicator 2002	558	585	604	558	574	541	600	<b>614</b>	598	542	627	<b>597</b>	<b>588</b>

Source: Annual of statistic Lombardia Region (2004).

**Table 1.11.8 – Sustainability Indicators calculated by province, 2003**

	Bergamo	Brescia	Como	Cremona	Lecco	Lodi	Mantova	Milano	Pavia	Sondrio	Varese	Italia
Environmental quality indicator by Legambiente (Max Cremona=65,9)	61,3	50,1	52,2	65,9	63,3	58,8	62,5	<b>44,9</b>	59,9	65,6	57	-
Quality of life indicator by Italia Oggi (Max Belluno=1000)	693,58	465,95	579	714,74	608,85	481,04	791,21	<b>434,38</b>	535,53	746,4	329,04	-
Quality of life indicator by Il Sole 24 Ore (Max Firenze=545)	514	502	497	465	502	471	501	<b>544</b>	451	517	476	<b>470</b>
Ranking Legambiente	6	57	47	1	4	16	5	<b>84</b>	13	2	22	-
Ranking Italia Oggi	23	54	36	21	32	52	9	<b>58</b>	43	14	71	-
Ranking Il Sole 24 Ore	13	23	30	61	23	56	27	<b>2</b>	72	12	49	-

Source: Annual of statistic Lombardia Region (2004).

#### 1.11.4.4 Quality of life

To assess the sustainability of the province, we point out three macro indicators that measure the quality of life in the Italian provinces, processed by Il Sole 24 Ore, Italia Oggi (two Italian economic newspapers) and Legambiente (Environmental NGO) .

In the ranking elaborated by Legambiente, who mainly measures the quality and the state of the environment, the province of Milan turns out as the 84° unit; the provinces of Cremona and Sondrio are instead the first and the second.

However, in the other ranking by Il Sole 24 Ore, focused more on income and economic indicators, Milan turns out as the second Italian province .

## 1.12. SOCIAL ISSUES

### 1.12.1. A wealthy town

In previous chapter we discussed some indicators which are also relevant as far as social issues are considered. Synthetically:

- Milan is the wealthiest province in Italy, with a per capita income of 30,468 euro, against an average value for Lombardy of 27,371 euro and a national mean of 20.232 euro (Table 1.12.1);
- annual pro capita wages are about 17 per cent higher than national average (Table 1.12.2);
- activity rates are above national average; unemployment rate are below national average, but higher than regional average and their absolute level is quite high, particularly for female population and young people (Table 1.12.3);
- educational level of population is higher than the national average (Table 1.12.4), but significantly lower than that of other advanced European areas;

**Table 1.12.1** - Ranking of Italian provinces by per capita income, 2003

Rank	Province	Per capita income (EUR)	Rank	Province	Per capita income (EUR)
1	Milan	30,468	94	Napoli	12,994
2	Bolzano	29,016	95	Vibo Valentia	12,922
3	Bologna	27,487	96	Palermo	12,881
4	Firenze	26,898	97	Caltanissetta	12,818
5	Modena	26,777	98	Agrigento	12,606
6	Parma	26,181	99	Foggia	12,240
7	Mantova	25,952	100	Lecce	12,237
8	Roma	25,338	101	Cosenza	12,063
9	Aosta	24,896	102	Enna	11,935
10	Ravenna	24,228	103	Crotone	11,518

Source: elaborations by Chamber of Commerce of Milan on data Unioncamere-Tagliacarne.

**Table 1.12.2** – Annual per capita wages and salaries insured by workers registered with INAIL, 1995-2002 (thousand EUR)

	1995	1996	1997	1998	1999	2000	2001	2002
Milan	15,128	15,640	16,375	16,784	16,831	17,130	16,962	17,751
Lombardy	14,018	14,500	15,085	15,535	15,660	15,906	15,830	16,642
Italy	12,895	13,367	13,857	14,469	14,461	14,700	14,594	15,183
Milan (Italy = 100)	117,3	117,0	118,2	116,0	116,4	116,5	116,2	116,9
Lombardy (Italy = 100)	108,7	108,5	108,9	107,4	108,3	108,2	108,5	109,6

Note: Data relating to proprietors, family members and partners of handicraft enterprises, to apprentices and to members of cooperatives of fishermen and porters are not comprised.

Source: INAIL (National Institute for Insurance against Occupational Accidents).

**Table 1.12.3** – Indices of labour force participation, 2003 (%)

	Province of Milan			Lombardy			Italy		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Activity rate of population aged 15-64	76.7	57.3	67.1	77.2	55.5	66.5	74.8	48.6	61.7
Unemployment rate (overall)	3.7	5.7	4.5	2.5	5.2	3.6	6.8	11.6	8.7
- for population aged 15-64	3.8	5.7	4.6	2.5	5.2	3.6	6.9	11.7	8.8
- for population aged 15-24	13.9	16.2	14.9	9.4	12.8	10.9	24.2	30.9	27.1

Source: Istat.

**Table 1.12.4** – Educational level of population aged 6+, 2001 (%)

	Milan (province)	Lombardy	North- Western Italy	North- Eastern Italy	Central Italy	Southern Italy and Islands	Italy
Graduate or post graduate degree certificate	8.8	6.7	6.5	6.1	7.8	5.9	6.5
Other tertiary degree certificate	1.3	1.2	1.1	1.1	1.2	0.8	1.0
Upper secondary school certificate	29.6	26.9	26.5	26.5	28.4	23.7	25.9
Secondary school or professional certificate	30.9	31.8	31.7	30.3	27.9	30.1	30.1
Primary school certificate	22.3	26.3	26.8	27.2	24.6	23.9	25.4
Literates without school certificate	6.5	6.7	6.8	8.2	9.2	12.7	9.7
Illiterates	0.6	0.5	0.6	0.6	0.9	2.9	1.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Istat.

**1.12.2. Is quality of life high?**

A synthetic index of the quality of life in Italian towns has been built by the Italian economic newspaper *Il Sole 24 Ore*. The synthetic index, which was calculated for the 103 capitals of Italian provinces, is based on a total of 36 different indices owing to 6 categories:

- wealth and standard of living;
- business and work;
- services and environment;
- criminality;
- population;
- leisure time.

In 2004, Milan ranked 2<sup>nd</sup> among the 103 Italian towns which have been considered in the study, maintaining the position already obtained in the year 2003 (Table 1.12.5).

**Table 1.12.5** – Synthetic index of quality of life in 103 Italian towns: overall ranking

Rank		Index value	Rank 2003	Difference
1	Bologna	506.9	5	+ 4
<b>2</b>	<b>Milan</b>	<b>505.8</b>	<b>2</b>	=
3	Trento	504.3	13	+ 10
4	Forlì	500.2	7	+ 3
5	Florence	499.0	1	- 4
6	Trieste	496.2	21	+ 15
7	Siena	494.9	10	+ 3
8	Aosta	493.3	10	+ 2
9	Gorizia	489.5	4	- 5
10	Bolzano	488.2	5	- 5
94	Salerno	355.5	90	- 4
95	Catania	354.2	99	+ 4
96	Palermo	351.2	101	+ 5
97	Reggio Calabria	351.0	99	+ 2
98	Caserta	350.9	77	- 21
99	Lecce	350.5	94	- 5
100	Taranto	348.4	102	+ 2
101	Foggia	344.4	96	- 5
102	Benevento	344.3	98	- 4
103	Messina	343.0	103	=
	National average	470.1		

Source: *Il Sole 24 Ore*.

This result is mainly due to the economic performance: Milan ranks 1<sup>st</sup> for the “wealth and standard of living” category and 5<sup>th</sup> for the “business and work” category (Table 1.12.6). It is worth noticing that Milan ranks first for five indices of the first area out of six, the only exception being the amount of rents, for which Milan rank 102<sup>nd</sup>, only Venice being more expensive.

**Table 1.12.6 – Synthetic index of quality of life in 103 Italian towns: the performance of Milan**

	Rank	Milan	National average
<b>Wealth and standard of living (synthetic index)</b>	1	797,90	508,10
Per capita value added, 2003 (euro million)	1	30.468,00	19.498,59
Bank deposits per inhabitant, 31.12.2003 (euro)	1	23.331,12	9.203,76
Average monthly amount of pensions, 2003 (euro)	1	848,72	584,40
Life premium per inhabitant, 2003 (euro)	1	2.195,47	826,76
Expenses per inhabitant for durable goods, 2003 (euro)	6	1.333,50	945,14
Monthly rent for a 100 squared meters in town centre, 2003 (euro)	102	2.167,00	899,70
<b>Business and work (synthetic index)</b>	5	568,80	424,00
New enterprise enrolments / cessations, oct. 2003 – sep. 2004	16	1,37	1,24
No. enterprises active in knowledge economy / 1,000 inhabitants, 2004	3	1,97	0,64
% persons in search of labour / labour force, 2003	49	4,54	8,53
% value added / exports	25	31,57	21,42
Protests per inhabitant, oct. 2003 – sep. 2004 (euro)	98	116,38	75,12
% interest rates for short-time cash loans, 31.12.2003	2	4,18	6,14
<b>Services and environment (synthetic index)</b>	30	553,90	532,50
Index on infrastructural endowment (by Istituto Tagliacarne)	13	159,82	99,84
Index on urban ecosystem, 2004 (by Legambiente)	81	43,07	47,89
Difference between average monthly temperatures in the hottest and the coldest month	86	21,67	19,25
% discharge of resident patients from hospitals in other regions, 2002	15	3,78	8,70
% deaths for tumour / total deaths, 2001	101	35,91	28,83
Pending procedures per 1,000 inhabitants, 31.12.2003	38	41,23	63,40
<b>Criminality (synthetic index)</b>	95	218,20	324,30
Reported robberies per 100,000 inhabitants, 2003	96	101,30	39,22
Reported theft in houses per 100,000 inhabitants, 2003	72	340,91	285,85
Reported theft of cars per 100,000 inhabitants, 2003	100	749,07	212,99
Reported bag-snatchings and pickpocketings per 100,000 inhabitants, 2003	100	820,39	201,24
Reported frauds per 100,000 inhabitants, 2003	54	303,59	320,65
Variation of the total number of reported crimes, 1999-2003	18	91,92	113,10
<b>Population (synthetic index)</b>	90	349,20	409,90
Inhabitants / squared km., 2003	102	1.904,95	245,24
Inhabitants aged 15-29 / inhabitants aged 65+, 2003	54	0,86	0,91
Number of graduated / 1,000 persons aged 19-25, 2002/2003	30	49,97	43,62
New enrolment at registry office for transfers per 100 cancellations, 2003	68	136,02	149,08
Number of divorces and judicial separations per 10,000 families, 2002	84	71,45	57,00
Number of suicides and attempts at suicide per 10,000 inhabitants, 2002	51	14,56	15,53
<b>Leisure time (synthetic index)</b>	9	546,70	372,10
No. of artistic, cultural and recreational associations / 100,000 inhabitants, sep. 2004	18	129,62	101,32
Book absorption index per inhabitant (%), aug.2004	6	2,24	0,71
% tickets at movie theatres / inhabitants, 2003	7	2,89	1,50
Index of oenological and gastronomic offer, 2004	8	126,61	74,64
Number of restaurants per 100,000 inhabitants, sep. 2004	97	101,41	165,46
Number of gymnasiums per 100,000 inhabitants, sep. 2004	49	6,78	6,96
<b>Synthetic index of quality of life</b>	<b>2</b>	<b>506,90</b>	<b>470,10</b>

Source: *Il Sole 24 Ore*.

The performance of Milan is good also for the “leisure time” category (the overall ranking is 9<sup>th</sup>), but only discrete for the “services and environment” category (30<sup>th</sup> rank). In this category, the performance is good

as far as the structural endowment (13<sup>th</sup> rank) and the health system (15<sup>th</sup> rank) are considered, while is very bad if we consider the urban ecosystem (81<sup>st</sup> rank) and the incidence of deaths for tumour on total deaths (101<sup>st</sup>), the latter index being probably influenced by the high levels of pollution.

Finally, the performance of Milan is very bad in two categories: population (90<sup>th</sup> rank, owing to high population density and aging of inhabitants, number of divorces, judicial separations and suicides) and criminality (95<sup>th</sup> rank).

The analysis of these results suggest that the 2<sup>nd</sup> overall ranking of Milan for the synthetic index of quality of life is at least in part misleading. Milan is a wealth city, which ensures its inhabitants many opportunities in the fields of business, labour, culture and leisure time, but in which living is not so easy owing to the high levels of cost of living, pollution, traffic, and criminality. And with a very high cost of living, which is the cause of an increasing economic and social disease.

### 1.12.3. Economic and social disease

In 2004 Milan ranked first among largest European towns for cost of life (Table 1.12.7 and Table 1.12.8). The total amount of current expenses for a family of three persons were estimated in 2000 at 3,071 euro.

Real estate values are among the highest in the world. But all consumer prices are very high in Milan, far beyond what official Istat statistics can demonstrate. Almost all goods and services are expensive, including training costs and cultural goods. In these conditions, the town is increasingly populated by older people, the upper middle class and the professionals, most of which can effort the cost of leaving the town in week-ends, in order not to pay the full cost of pollution and chaos. And they leave the city and the few parks to vagabonds of suburbs and immigrants, which celebrate the holiday usage of urban picnic, rigorously divided by ethnic group and nationality, to feel at least once a week less lonely in the city of work and wealth and to have, all together, an impression of happiness.

**Table 1.12.7 – Cost of life in some European towns, 2001–2004**

	Rank 2001	Rank 2002	Rank 2003	Rank 2004	Index 2004	Index 2004 (without medicines)
Milan	58°	63°	17°	13°	100	100
Paris	57°	74°	23°	17°	99	95
Rome	79°	99°	41°	21°	99	87
Berlin	85°	104°	58°	28°	92	86
Frankfurt	92°	109°	65°	42°	87	86
Barcelona	107°	115°	81°	56°	83	84
Madrid	107°	117°	86°	61°	78	80
Lyon	111°	123°	89°	69°	75	77

Source: elaborations based on Mercer and Eurostat (on a sample of 144 towns in the world).

**Table 1.12.8 – Per capita added value and price levels in European towns**

	Monthly expenses for a three-persons family (euro) (A)	Monthly rent for a flat in semi-centre (euro) (B)	Total expenses (A)+(B)	Price levels Index (Milan=100)	Per capita added value (year 2000, euro)	Per capita added value Index (Milano=100)
Milan (Lombardy)	1,371	1,700	3,071	100	26,589	100
Frankfurt (Hessen)	1,365	1,300	2,665	87	30,035	113
Berlin	1,362	1,300	2,662	87	22,198	83
Paris (Île de France)	1,260	1,950	3,210	105	36,616	138
Rome (Lazio)	1,191	1,350	2,541	83	22,312	84
Lyon (Rhône-Alpes)	1,140	750	1,890	62	23,852	90



Barcelona (Catalunya)	1,074	1,200	2,274	74	18,468	69
Madrid	1,032	1,150	2,182	71	20,142	77

*Source: elaborations based on Mercer and Eurostat (on a sample of 144 towns in the world).*

In this context, the number of people which risk to fall into poverty is increasing. A research carried out in 2004 by the “Observatory on poverty” of the University of Milano-Bicocca on the inhabitants of the municipality of Milan estimated that more than one out of five risks to fall into poverty. As many as 162,000 persons (12.9 per cent of inhabitants and 14 per cent of families) are below poverty threshold, established at a monthly income of 826 euro for a family of two persons. For 7.3 per cent of inhabitants and 8 per cent of families can be considered “nearly poor”: their monthly per capita income do not reach the threshold of 1,000 euro, an amount which has become insufficient to live in Milan. As a consequence, living in Milan has become challenge for 20.2 per cent of inhabitants and 22 per cent of families of natives (immigrates were not considered in this study).

Immigrates apart, retired persons, single women with their sons and widows are the categories which more than other risk to fall into poverty. Milan is among the oldest towns in Europe, with 284,000 inhabitants (22 per cent of the total) aged 65 or more. More than 40 per cent of them live alone. For this reason, the assistance to older people is considered as a priority by the assessorship to social services of the municipality. Nearly half of the budget of the assessorship (about 200 million euro) is dedicated to help elder people, particularly for domiciliary assistance (7,000 persons) and the payment of the charge of old people’s homes.

Beyond those we can consider really poor people, which survive with incomes below poverty threshold, living from hand to mouth, there are other four categories at risk. First of all, those which lost or are loosing their job, commuters of the “Cassa Integrazione Guadagni” (the guaranteed wage fund) and the precariousness of work: the main victims of the industrial, economic and anthropologic mutation which is transforming Milan. Then, the newcomers of moonlighting (mainly, but not only, irregular immigrates), an Italian plague which is still largely diffused in small-sized businesses and in building yards. Most of people included in these two categories are unskilled workers, with low levels of school attendance, difficult to retrain, condemned to have no faculty to choose, change, take opportunities.

Then, the last two categories at risk. We can call the first of them the “ex middle class”: white-collar workers and technicians with wages about a thousand euro a month, which by this time is frighteningly moving downwards in the social scale. They have been forced to compress consumptions and hopes, standard of live and desires for social promotion. Among them we can find even teachers, a category which still maintain some social prestige in small towns, but in Milan is becoming a sort of “intellectual proletariat”. The problem is evident: it is difficult to live in Milan not even with only one of such salaries, but even with two. The “crisis of the fourth week” is affecting more and more persons and families are growingly getting into debt to meet current expenses. In this situation, an unexpected event (an illness, a divorce, the loss of the job) could lead a person and its family even to extreme poverty.

The last cause of economic disease in Milan is the increasing precariousness of labour, particularly for the young people. Some families are suffering investments made to maintain their sons at the university, hoping that those efforts would have been repaid. But nowadays, their sons, most of which (often graduated sons face a labour market characterized by precarious employment and low wage levels, which obstruct the way to plan for the future and risk to make them fall into a new category of “metropolitan poors”, increasing the ranks of “intellectual proletariat” and frustrated graduated persons. It is more for economic reasons than for the so-called “mammismo” that many young people live in their parents home even at thirty years or more. Those who were not provided a flat by their parents ceased to dream

obtaining a loan to buy a their own flat and even can hardly effort a rent for a one-roomed flat, which drains 60-70 per cent or more of their income.

A worrying signal of the increasing economic disease is the growth of the number of injunctions. Injunction is an elementary form of justice: when a debt is so certain and undeniable that it is no use to take a legal action, the creditor goes to the court of justice and enrolls an injunction. If the debtor doesn't pay, a foreclosure order is released. Almost always, the story of wrecked hopes is behind injunctions; in most cases, different stories of many similar dramas, stories of citizens who bit off more than they could chew. An unpaid bill for a piece of furniture or a household appliance, a shop with no more guests, a small company on the verge of ruin. All those who bought a new car with a leasing, and couldn't pay the instalments. Tenants who didn't pay the rent, were evicted by the locksmith, their things brought to depot, and now are chased by the owners who claim for outstanding debts. In other cases, however, these problems are the consequence of a sort of compulsory propensity towards illogical consumptions. Some of those who were wrecked by instalments were not following indispensable articles, but a digital camcorder, the last cell-phone, a plasma TV-set or a brand new car.

In any case, the town of Milan is getting full of wrecked hopes. Between 2002 and 2004, the number of injunction enrolled by the justice of pace (those with a value up to 2,600 euro) increased by 225 per cent. In 2004 the total number of enrolled injunctions was 47,000. The number of injunctions for higher sums is increasing as well: 29,521 in 2002, 33,312 in 2003 and more than 40,000 in 2004. Dossiers with injunctions are cumulating in the offices of the court of justice.

### 1.13. CONCLUSION

The evidence collected and the statistics seem to indicate that the Province of Milan is going through a transitional phase: the globalization process puts out new challenges that have to be taken up with quickness and determination, in particular following the decentralization of the administrative powers.

Milan is certainly well placed to capitalize on these trends, especially as a rich industrialized and functioning province that could make full use of large resources and endowments. If some short-term economic indicators show signs of drop, especially in trade performance and growth rates, the trend in many qualitative indicators seems to be really positive.

As other European metropolitan areas, the province doesn't definitely suffer from financial and economic marginality, instead it thrusts forward the economic recovery in some leading-edge sectors, such as fashion industry, design and architecture.

Even if in a period of weak growth, many actors of the economy and the civil society have kept doing business and working to strengthen development strategies based on quality of human capital and new organizational models of business.

Some positive trends, in terms of urban recovery, are quite clear: new real estate investments in the core and dismissed areas, the property boom, some large building project, new entrepreneurial skills, the reform and simplification of the public administrations aimed at easing economic and social activities. A stable and balanced social structure, based on an mixed and articulated economic and social fabric, does also play a leading part to absorb the undergoing transformations and to support the economic development.

Taking a closer look, we can draw some first tentative conclusions about the strengths and weaknesses of the area under review.

With relation to risk factors and weaknesses, there are some short term dynamics that could become relevant in perspective, such as the drop in the growth rates, the evolution of the trade patterns and internationalization processes, and the weakness of innovation capacity.

In the last years, the economy of the province didn't increase in quantitative terms, even if this trend reflect a generalized situation of stagnation in the national economic system. At the beginning of the year, current trends are quite negative: the industrial production, in all sectors and in particular for small and medium enterprises, decreased by 1% compared to first quarter 2004; the economic forecasting formulated by the operators in the services' sector are a bit pessimistic, the only exception being the innovative services to private enterprises.

In terms of internationalization, the productive system of the province seems to be blocked for three years; the modest performance in the export was mainly due to the negative trend in the high-tech manufacturing sectors (-5,8%). The system therefore remains "closed" to foreign markets, even if the import flows continue to increase.

There is also growing concern about the innovation capacity of the system, especially in the high-tech industry, where the recent drop in competitiveness and numbers of employed is really huge; is this a national problem, but it concentrates in the metropolitan area of Milan, where the high-tech industry still represents a strategic resource for the international development of the system.

In terms of plus factors, structural data show a relatively positive situation, especially for the endowment of human and social capital, the diversification of the economic base, the activism of civil society and the planning capacity for relevant private-public works.

This is not always true, especially for infrastructure networks; in many cases, the delay to realize the infrastructure works, deferred by the lack of financing, by complex procedures, by political and local conflicts, has been an obstacle to the productivity of the companies and to the economic system of the province.

The infrastructure system is today in a heavy inefficiency and also, in many strategic areas, in a substantial collapse, curbing the economic and territorial development of the province.

Competitiveness of the metropolitan area therefore suffers from a shortage of network facilities, but the local performance is conditioned also by a multitude of interacting qualitative factors such as the endowment of intangible and relational assets, the supply of major functions (cultural centres, trade fair) and the opportunities offered to private citizens.

All these factors have to be exploited in a strategic way through the integration of private-public actors and the efficient employment of all financial and human resources.

In this sense, a more sustainable planning and sound management of provincial territory are the main strategic factors that could improve local competitiveness and attractiveness.

This last consideration refers to the institutional cooperation issue, that will be discussed later on (see in particular § 3.4): in the province of Milan, the ability to build up governance networks for strategic purposes, in a long-term perspective, seems to be still too weak.

Public administrations (local, provincial, regional) in the territory and some main actors have accepted this challenge, beginning to promote private-public partnerships and to create communication networks between different levels of governance, but this, apart from notable exceptions (the new Fair at Pero-Rho, Malpensa Airport) is still inadequate. Stable and effective mechanisms of governance are missing, especially in terms of strategic alliances directed to specific sectors or projects.