CHAPTER 12

THE ACCOMMODATION PLAN FOR VISITORS AND PARTICIPANTS' STAFF

ABSTRACT CHAPTER 12

ESTIMATING ACCOMMODATION CAPACITY

SUPPLY

The area used to assess accommodation capacity extends for 100 km from the centre of Milan, namely a 1h30 drive under normal traffic conditions. Hotel accommodation was considered in addition to the so-called complementary accommodation, such as camp sites, resorts, farm holidays and bed&breakfasts. The current estimate for accommodation stands at over 500,000 beds.

In recent years, Lombardy's accommodation capacity has grown at an average of 1% per year for hotels and 2% for complementary accommodation. On the basis of this, in 2015 it is reasonable to expect an accommodation capacity of roughly 600,000 beds.

In addition to this, new investment in accommodation is planned in the Milan area, more specifically:

- investment in new accommodation specifically designed for the Expo that, subsequently, will be used for other purposes;
- design and construction of specific facilities for peak times, such as the creation of a youth pavilion;
- encouraging the creation of temporary bed&breakfast facilities to support the permanent accommodation.

DEMAND

Based on the analysis of normal tourist flows and the relevant demand for guest nights linked to these flows, we determined the current global demand for guest nights in the relevant geographic area.

We added to this value an average growth rate per year in line with the expected growth in accommodation supply and we thus defined the potential consumption of guest nights expected for 2015. Comparing this value with the estimates of accommodation capacity, we calculated the overall number of guest nights available in 2015 to meet the demand generated by the Expo, at around 60 million (over the six months of the event).

THE CAPACITY TO MEET THE DEMAND GENERATED BY EXPO 2015

- The assumptions on the number and type of visitors have enabled us to determine the consequent demand for accommodation, which was estimated around 34 million guest nights over the six months of the Expo. This estimated demand seems compatible with the residual available accommodation (net of the absorption generated by regular tourist flow), thus leaving a margin of 26 million guest nights to cater for peak times.
- A test run on the different price categories available enabled us to assess how affordable these were compared to visitor spending capacity.

12.1 Accommodation capacity: already sufficient to meet Expo demand

The area encompassed within a 90-minute travel distance of the City of Milan currently offers lodging capacity sufficient to accommodate over 500,000 guests. Our assessment of currently available lodging and Expo visitor flow capacity has been conducted with the support of the Economics of Tourism Department at the **Bocconi University.** The Department works with tourism operators and investors in order to monitor trends in the market, and has provided us with valuable historical data.

Our assessment focuses on the area within a 100 km radius from central Milan, translating into a maximum travel time of **one hour and thirty minutes** in normal traffic conditions. Hence, **in addition to the Province of Milan, the assessment covers the following geographical areas**:

- **the northern sector**, including the Provinces of Como, Varese, Lecco and Verbania, and Lugano in Switzerland;
- **the southern sector**, including the Provinces of Pavia, Lodi, Piacenza and Parma;
- **the eastern sector**, including the Province of Bergamo and a portion of the Province of Brescia (we might also consider the Province of Verona. Although it is over 100 km from Milan, rail travel time between the two cities is less than one hour and thirty minutes);
- **the western sector,** including the Provinces of Novara, Alessandria, Asti and Vercelli (the Province of Turin might also be considered for reasons analogous to those cited for Verona, with the added advantage of the high speed rail link, which will be fully operational in 2008).

The above Provinces offer well developed hotel facilities with a balanced distribution among the different categories.

The city of Milan has a clear bias towards high level hotels that are strongly oriented toward business travellers and conventions, a trend which is also reflected in the cities of Como, Brescia and Lodi. The Provinces of Como, Brescia, Varese and Verbania are more typically characterised by recreational (lakeside) and cultural tourism, and offer a significant number of hotels in the one- to three-star range. The Lombard Provinces of Sondrio, Cremona and Mantua have not been considered since they lie at the limit or outside of the one hour and thirty minute travel radius. They do, however, offer high accommodation capacity. A large number of tourists visit these areas, drawn by the mountains around Sondrio and by the cultural attractions of Mantua and Cremona.

Special travel packages could be developed to include these areas in the Expo support area.

The areas south and west of Milan (particularly those in Piedmont) are characterised by a relatively high number of mid-category hotel facilities.

The cities of Verona and Turin are similar to Milan in the composition of their hotel facilities, although they do have a higher concentration of 3-star hotels.

Area	Province	Accomm. capacity 5 star or higher	Accomm. capacity 4 star	Accomm. capacity 3 star	Accomm. capacity 2 star	Accomm. capacity 1 star	Total	%
Milan	Milan	6,168	28,956	25,592	3,447	3,091	67,254	25.5%
Northern sector	Como	667	3,804	4,939	1,482	1,143	12,035	4.6%
	Lecco	-	555	1,675	358	702	3,290	1.2%
	Varese	-	3,426	2,591	714	573	7,304	2.8%
	Verbania	436	3,861	6,729	1,257	1,042	13,325	5.1%
	Lugano	419	2,344	3,326	2,266	1,201	9,556	3.6%
Southern sector	Lodi	-	777	654	30	169	1,630	0.6%
	Pavia	-	1,099	2,173	586	827	4,685	1.8%
	Piacenza	-	844	1,721	535	535	3,635	1.4%
	Parma	392	3,570	6,312	2,054	973	13,301	5.0%
Eastern sector	Bergamo	-	2,507	6,424	1,751	1,252	11,934	4.5%
	Brescia	855	10,375	16,327	3,592	2,726	33,875	12.9%
	Verona	439	9,089	15,405	7,882	4,147	36,962	14.0%
Western sector	Novara	-	1,738	2,619	445	383	5,185	2.0%
	Vercelli	-	102	1,265	441	281	2,089	0.8%
	Alessandria	-	1,723	2,484	902	1,165	6,274	2.4%
	Asti	-	291	1,184	125	150	1,750	0.7%
	Turin	462	6,851	14,974	4,392	2,767	29,446	11.2%
TOTAL		9,838	81,912	116,394	32,259	23,127	263,530	100%
%		3.7%	31.1%	44.2%	12.2%	8.8%	100%	

Table 12.1 – Hotel capacity by category and Province – 2005
Source: ISTAT and Regione Lombardia

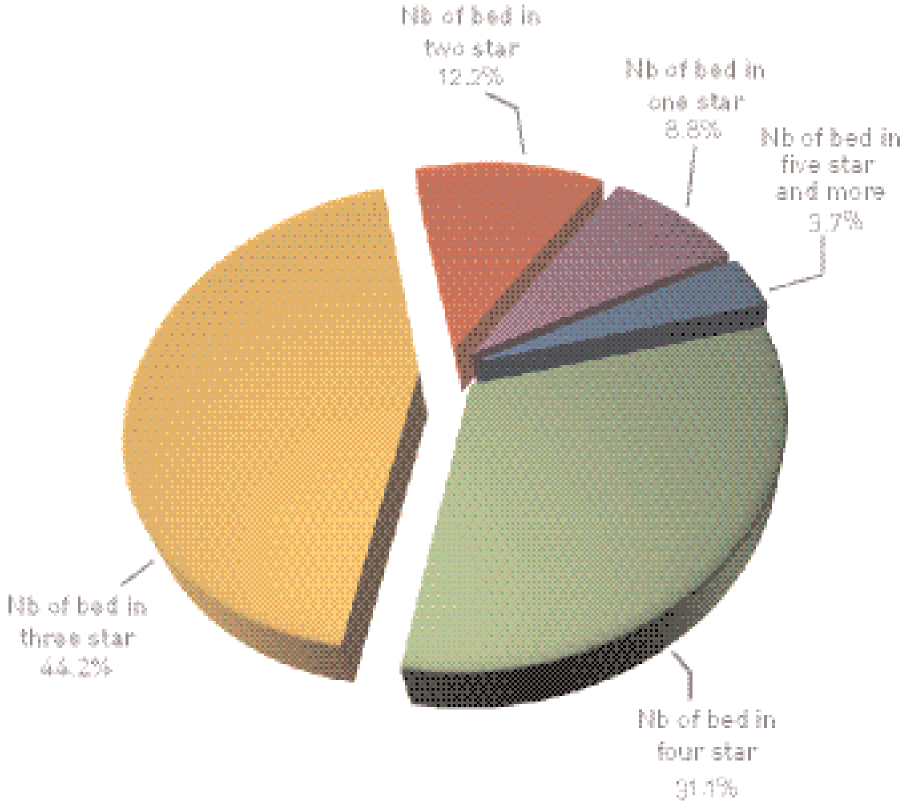


Figure 12.2 – Hotel capacity distribution by category – 2005
Source: ISTAT and Regione Lombardia

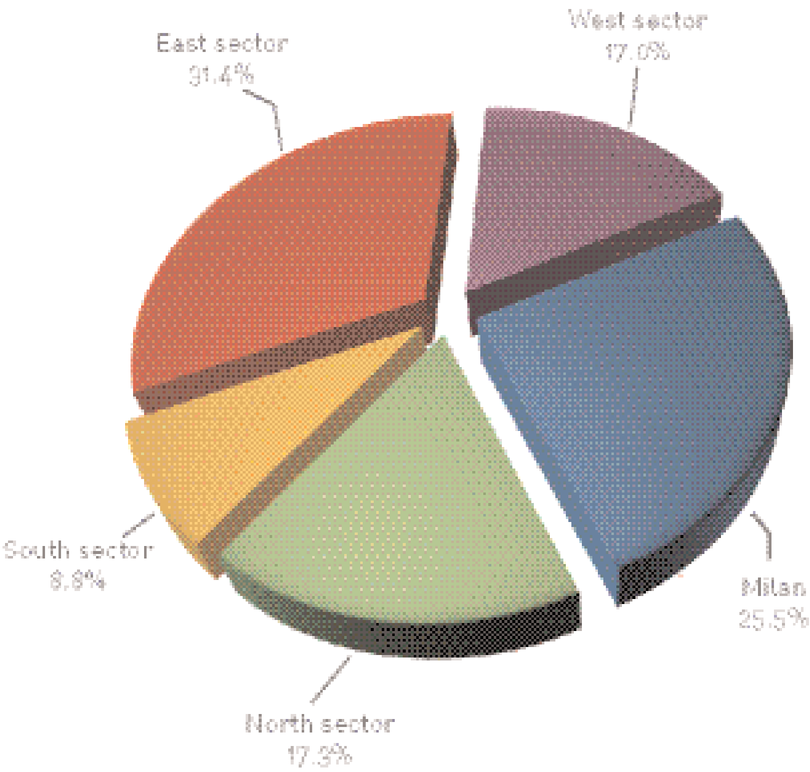


Figure 12.3 – Hotel capacity distribution by geographical area – 2005
Source: ISTAT and Regione Lombardia

In addition to hotel facilities, we have also considered **complementary lodgings**, which comprise a mixed set of services such as campgrounds, tourist villages, agricultural tourism facilities, and Bed & Breakfast (B&B) facilities.

This sector has grown significantly in recent years, with facilities concentrated mainly toward the periphery of our study area, around Novara, Brescia, Lecco, Bergamo and Como. Complimentary lodging facilities generally offer accommodation at a lower price than traditional hotels and **thus represent an important supplementary resource for Expo visitors**, a significant portion of whom will be young people and families with average incomes.

Area	Province	Accommodation capacity Bed & Breakfast	Accomm. capacity Campgrounds and tourist villages	Accomm. capacity Agricultural tourism facilities	Accomm. capacity Other facilities	Total	%
Milan	Milan	222	1,332	-	1,737	3,291	1.3%
Northern sector	Como	609	13,957	421	301	15,288	6.2%
	Lecco	165	7,641	145	315	8,266	3.3%
	Varese	287	6,745	193	304	7,529	3.0%
	Verbania	1,449	20,325	197	104	22,075	8.9%
	Lugano	-	-	-	-	-	0.0%
Southern sector	Lodi	15	-	-	40	55	0.0%
	Pavia	75	930	144	116	1,265	0.5%
	Piacenza	284	2,000	549	476	3,309	1.3%
	Parma	999	2,237	466	1,626	5,328	2.2%
Eastern sector	Bergamo	157	7,188	104	1,423	8,872	3.6%
	Brescia	6,755	44,890	1,368	2,382	55,395	22.4%
	Verona	56,265	14,668	978	3,100	75,011	30.3%
Western sector	Novara	10,330	4,284	1,079	7,386	23,079	9.3%
	Vercelli	9,111	-	182	581	9,874	4.0%
	Alessandria	1,423	151	137	923	2,634	1.1%
	Asti	820	305	1,143	845	3,113	1.3%
	Turin	975	378	991	909	3,253	1.3%
TOTAL		89,941	127,031	8,097	22,568	247,637	100%
%		36.3%	51.3%	3.3%	9.1%	100%	

Table 12.4 – Accommodation capacity in complementary facilities by category and Province – 2005
Source: ISTAT and Regione Lombardia

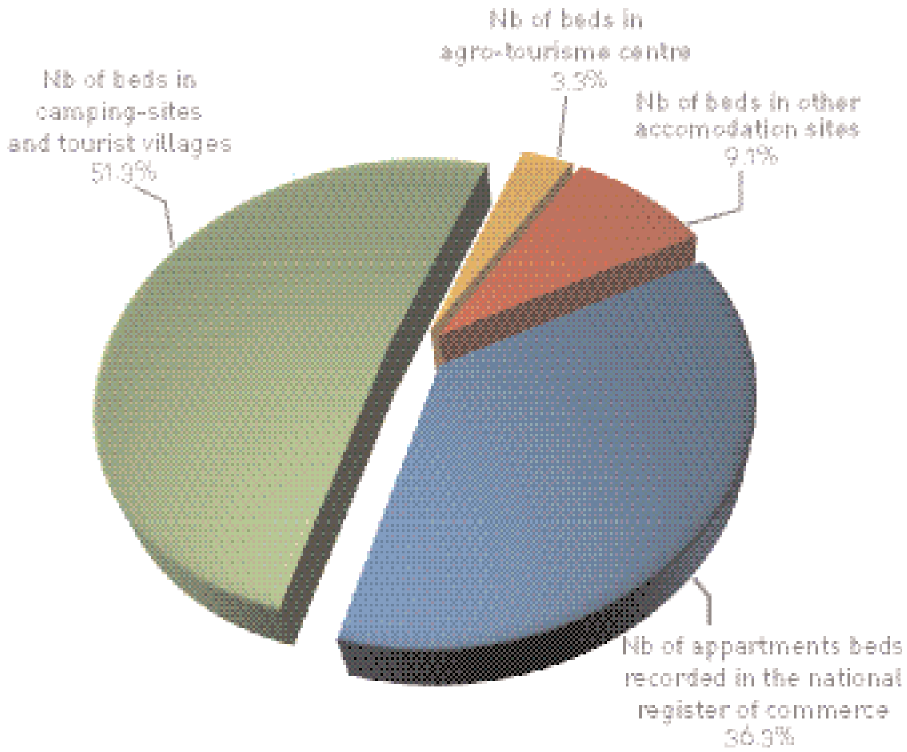


Figure 12.5 – Distribution of accommodation capacity in complementary facilities by category – 2005
Source: ISTAT and Regione Lombardia

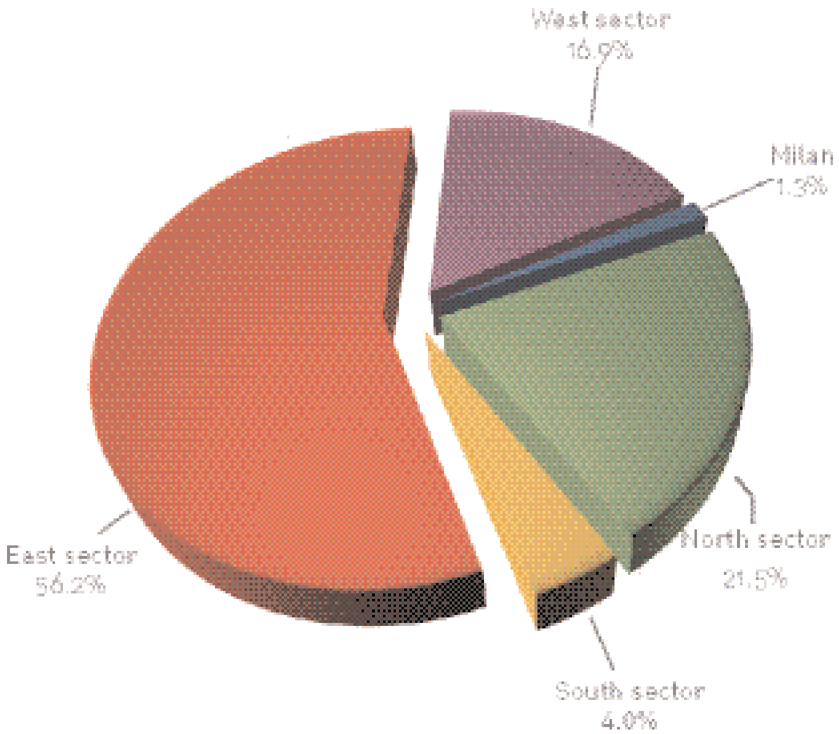


Figure 12.6 – Distribution of accommodation capacity in complementary facilities by geographical area – 2005
Source: ISTAT and Regione Lombardia

The summary tables below illustrate a diversified and evenly distributed range of accommodation facilities as follows:

- there is a **high proportion of 3-4-5-star hotels in the city of Milan;**
- there is **significant complementary lodging capacity in the lake areas** around Brescia, Como, Verbania, Verona and Novara, supplementing a large number of high level hotel facilities in the areas;
- **the overall accommodation capacity is evenly divided between traditional hotels and complementary facilities.**

Area	Province	Accomm. capacity Hotels	Accommodation capacity Complementary facilities	Total	%
Milan	Milan	67,254	3,291	70,545	13.8%
Northern sector	Como	12,035	15,288	27,323	5.3%
	Lecco	3,290	8,266	11,556	2.3%
	Varese	7,304	7,529	14,833	2.9%
	Verbania	13,325	22,075	35,400	6.9%
	Lugano	9,556	-	9,556	1.9%
Southern sector	Lodi	1,630	55	1,685	0.3%
	Pavia	4,685	1,265	5,950	1.2%
	Piacenza	3,635	3,309	6,944	1.4%
	Parma	13,301	5,328	18,629	3.6%
Eastern sector	Bergamo	11,934	8,872	20,806	4.1%
	Brescia	33,875	55,395	89,270	17.5%
	Verona	36,962	75,011	111,973	21.9%
Western sector	Novara	5,185	23,079	28,264	5.5%
	Vercelli	2,089	9,874	11,963	2.3%
	Alessandria	6,274	2,634	8,908	1.7%
	Asti	1,750	3,113	4,863	1.0%
	Turin	29,446	3,253	32,699	6.4%
TOTAL		263,530	247,637	511,167	100%
%		51.6%	48.4%	100 %	

Table 12.7 – Accommodation capacity in hotels and complementary facilities by category and Province – 2005
Source: ISTAT and Regione Lombardia

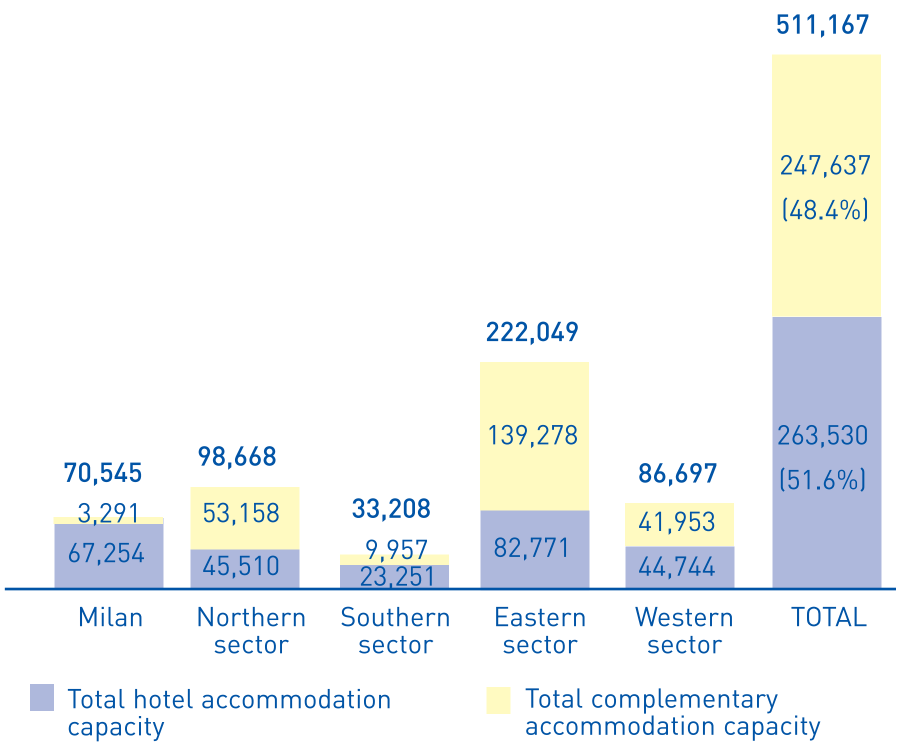
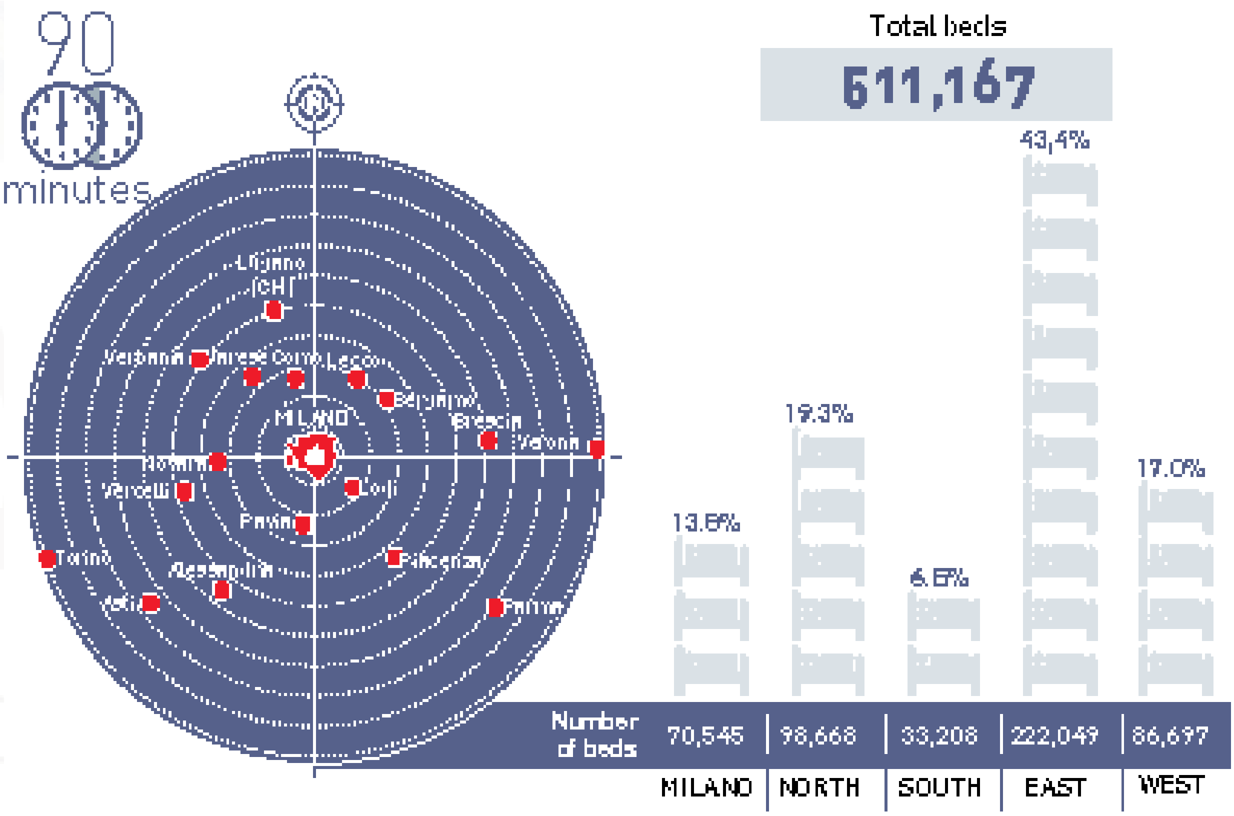


Figure 12.8 – Distribution of accommodation capacity in hotels and complementary facilities by geographical area – 2005
Source: ISTAT and Regione Lombardia

The geographical distribution of accommodation facilities mainly **gravitates around Milan**, with a second pole located in Brescia, and two minor poles in Como and Bergamo (although the overall Como-Bergamo area offers nearly the same capacity as the Brescia area).

In general, accommodations in higher category facilities are concentrated in Milan, which also has the highest average prices. Lower category hotel and complementary facilities are mainly located in the peripheral area or in the Brescia and Como areas.

Hotels within 90 minutes of Milan



Area	Province	Available beds: Hotels	Available beds: Complementary accomodations	Available beds: Total	%
MILANO	Milano	67,254	3,291	70,545	13.8%
NORTH	Como	12,035	15,288	27,323	5.3%
	Lecco	3,290	8,266	11,556	2.3%
	Varese	7,304	7,529	14,833	2.9%
	Verbania	13,325	22,075	35,400	6.9%
	Lugano	9,556	-	9,556	1.9%
SOUTH	Lodi	1,630	55	1,685	0.3%
	Pavia	4,685	1,265	5,950	1.2%
	Piacenza	3,635	3,309	6,944	1.4%
	Parma	13,301	5,328	18,629	3.6%
EAST	Bergamo	11,934	8,872	20,806	4.1%
	Brescia	33,875	55,395	89,270	17.5%
	Verona	36,962	75,011	111,973	21.9%
WEST	Novara	5,185	23,079	28,264	5.5%
	Vercelli	2,089	9,874	11,963	2.3%
	Alessandria	6,274	2,634	8,908	1.7%
	Asti	1,750	3,113	4,863	1.0%
	Torino	29,446	3,253	32,699	6.4%
TOTAL		263,530	247,637	511,167	100.0%
		51.6%	48.4%	100.0%	

Sources: Istat and Regione Lombardia

12.1.1 Accommodation capacity growth forecast

In order to estimate the overall accommodation potential of the Expo support area in the year 2015, we must estimate a growth rate for hotel and complementary lodging capacity.

This estimate is based on historical data from the period 1991-2005. Table 12.9 illustrates growth in hotel accommodations over the 15-year period from 1991 to 2005 evaluated at 3-year intervals[1].

The table clearly shows a strong growth in accommodations in Lombardy, with a 16.7% expansion over the entire period or an average yearly growth of 1.1%. However, significant differences are observed among the different Provinces. While some exhibit strong growth, others show a more limited or even decreasing trend. **The fastest growth is observed in the Milan area** (including the nearby Province of Lodi), with average growth of 31% in accommodation capacity (providing lodging for over 15,000 additional guests). The **Como-Varese area** also shows notable development, partially due to the influence of the Malpensa airport. Expansion has been slower yet still significant in Brescia, with a 9.8% increase in lodging capacity, corresponding to a number of beds second only to the Milan area. However, accommodation capacity in the Bergamo and Lecco areas has declined. These areas are mainly characterised by cultural and lakeside tourism and are undergoing profound structural changes, with traditional hotels tending to be replaced by complimentary lodgings (mainly B&Bs and campgrounds).

Province	1991	1993	1996	1999	2002	2005
Milan	51,476	53,276	54,478	56,681	61,873	67,254
Como	11,581	12,619	13,052	17,280	12,272	12,035
Varese	4,500	4,361	3,876	3,331	3,227	3,290
Lecco	5,729	5,754	5,841	6,240	6,591	7,304
Lodi	1,244	1,297	1,249	1,250	1,227	1,630
Pavia	4,625	4,790	4,331	4,196	4,323	4,685
Bergamo	12,383	12,767	11,776	11,517	11,317	11,934
Brescia	29,941	30,790	30,019	30,300	32,466	33,875
Lombardy total	121,479	125,654	124,622	130,795	133,296	142,007
3-year growth		3.4%	-0.8%	5.0%	1.9%	6.5%
15-year growth						16.9%
CAGR						1.1%

Table 12.9 – Hotel accommodations in the Lombard provinces – 1991-2005
Source: Tourism Department of Università Bocconi based on Regione Lombardia data
CAGR = Compounded Average Growth Rate

1 The choice of historical period was determined by the availability of data. Reliable data were not available prior to 1991 or after 2005. Sufficiently detailed data were only available for the region of Lombardy, while data for the Provinces in other regions of the macro-area cover a shorter time span. Nevertheless, the analysis of the Lombardy data is considered to be highly representative of the Provinces outside of Lombardy in virtue of their proximity and similarities in tourism demand and facilities

A quite diversified picture is observed for **complementary lodgings**, with the above-mentioned **expansion in the Provinces of Bergamo and Lecco coupled with growth in the Province of Pavia**. Modest growth in this segment is recorded in Milan, helping to offset the significant shrinkage in Varese and in the Brescia area. This growth is due to the increase in **agricultural tourism** and **Bed & Breakfast** accommodations. The latter were officially recognised by Italian law only toward the end of the 1990s, and immediately began filling a large gap in Italian lodging options. The growth we have observed is typical of emerging phenomena, and the capacity added over the period suggests that growth will gradually stabilise in the coming years in spite of the fact that the demand for this type of facility is still very high in the cities and towns of our study area. The decrease in complimentary lodging capacity in the Brescia and Varese areas is due instead to redevelopment of the hospitality market, which is driving growth in medium-sized hotels and a shift from complementary facilities (mainly campgrounds) to traditional hotels. In the Brescia area, this conversion of accommodation facilities is mainly due to changes in the demand of German tourists, who maintain their status as the dominant segment of the area's clientele. In the Varese area, the driving force has been the development of the Malpensa hub, which has led to the replacement of complementary lodgings with traditional hotel facilities.

Province	1991	1993	1996	1999	2002	2005
Milan	3,120	2,283	2,572	3,410	4,026	3,291
Como	16,036	13,668	12,882	13,109	13,227	15,288
Varese	7,933	7,933	8,027	3,320	3,410	8,266
Lecco	8,494	11,340	11,340	6,413	4,746	7,529
Lodi	-	-	-	617	13	55
Pavia	310	310	310	106	1,124	1,265
Bergamo	6,646	6,144	6,655	6,287	6,786	8,872
Brescia	67,694	62,839	53,645	52,889	55,797	55,395
Lombardy total	110,233	104,517	95,431	86,151	89,129	99,961
3-year growth		-5.2%	-8.7%	-9.7%	3.5%	12.2%
15-year growth						-9.3%
CAGR						-0.7%

Table 12.10 – Complementary lodgings in the Lombard provinces – 1991-2005
Source: Tourism Department of Università Bocconi based on Regione Lombardia data

We shall now seek to refine our forecast for growth in accommodation capacity by **assessing how facilities are changing in terms of type and size**.

We have selected two indicators to aid us in the assessment process:

- the first indicator (change in average size) regards the **average size of hotels in terms of the number of beds**. By reviewing data from different years, we may determine whether hotels are tending to get larger or smaller. This is an important factor in hotel management and profitability since larger dimensions generally translate into enhanced cost competitivity (economies of scale);

- the second **(hotel quality index)** examines how the distribution of accommodation capacity among the various hotel categories (from 1 to 5 stars) is changing over time. This will indicate **hotel quality enhancements**, as well as the capacity of the destination cities and towns to make needed investments to respond to changes in the market.

The first and last years in our historical period (1991-2005) are compared to determine how average hotel size has changed and which categories have been favoured in terms of development and investment. Our observations show that the average size of hotels has grown in all provinces, although this change is only significant in Milan, Lodi, Como and Varese (with minimum average increases of 20% in lodging capacity).

The most interesting observation in the period under consideration regards a strong shift in hotel category. In all provinces we observe a change from an initial situation characterised by a prevalence of 1-star or 2-star hotels (or at least a balance between these categories and 3-to-5-star hotels) to a situation where the overall capacity of the higher category hotels is from two to seven times greater than that of the two lowest categories. This is another symptom of a **process of profound changes in Lombard hospitality. Coupled with growth in B&Bs, there is also a rationalisation process whereby hotels have not increased much in number but expanded significantly in terms of accommodation capacity and category, shifting up the scale**. The investment dynamics behind these changes are clearly focused on economies of scale and greater efficiency in offering quality services. **These developments in the structure of hospitality facilities does not penalise potential guests operating on tight budgets since the concurrent development of complementary accommodation facilities is oriented principally to this segment**. This phenomenon is particularly pronounced in the Provinces of Bergamo, Lecco and Pavia, which are investing in a strong shift toward complementary accommodation facilities.

Lombard province	Average hotel capacity in 1991	Average hotel capacity in 2005	% variation
Milan	83	105	27%
Como	39	48	23%
Lecco	28	34	21%
Varese	35	45	29%
Lodi	44	60	36%
Pavia	30	35	17%
Bergamo	36	41	14%
Brescia	35	45	29%
Average	41	52	25%

Table 12.11 – Changes in average hotel size from 1991 to 2005
Source: Tourism Department of Università Bocconi based on Regione Lombardia data

Lombard province	Ratio of 3-5 star hotels to 1-2 star hotels in 1991	Ratio of 3-5 star hotels to 1-2 star hotels in 2005	% variation
Milan	5,15	9,29	80%
Como	0,98	3,58	265%
Lecco	0,43	2,10	388%
Varese	1,05	4,68	346%
Lodi	3,04	7,19	137%
Pavia	1,17	2,32	98%
Bergamo	0,69	2,97	330%
Brescia	1,51	4,36	189%
Average	1,80	4,56	160%

Table 12.12 –Hotel category shifts from 1991 to 2005 (hotel quality index)
Source: Tourism Department of Università Bocconi based on Regione Lombardia data

Milan and its neighbouring provinces are already able to meet the needs of ordinary and extraordinary (e.g., tradeshows, special events) **tourism with an excess accommodation capacity of some 40%.**

Our analysis of changes in the structure and capacity of Lombard accommodation facilities[2] in recent years allows us to estimate average expected growth rates both for hotels and for complementary facilities and thus to project total capacity for the year 2015.

2 These expansion forecasts can easily be extended to the greater area, which includes the provinces of Piedmont (Novara, Alessandria, Asti, Vercelli and Turin) and Emilia Romagna (Piacenza and Parma), and the Province of Verona. Turin in particular has shown strong growth associated with the 2006 Winter Olympics, while Verona's high growth is driven by its allure as a tourist haven and the increase in low-cost flights into the nearby Catullo airport

In particular, we may make the following observations:

- **hotel accommodations in the Lombard provinces show a compounded average growth rate (CAGR) of approximately 1.1% per year over the fifteen year period**. This value covers a relatively long period and incorporates economic downturns (such as the negative impact of the First Gulf War). It thus appears both reasonable and prudent to assume a future growth rate at least equal to this historical average;

- **complementary accommodation facilities**, while showing zero growth over the fifteen year period as a result of a significant reduction of camping facilities in the '90s, are currently showing a strong reversal of trend with growth of over 15% in the three-year period 2003-2005. Although the segment continues to expand, we may expect it to stabilise gradually over the long term. An **average annual growth rate of no greater than 2%** may thus reasonably be hypothesised;

- growth will not be evenly distributed among all hotel categories and accommodation types. It will be most marked in middle- to high-level hotels (3-5 stars) and in the B&B segment.

These observations are based on quantitative data and have been verified in the field so that we may obtain the clearest possible view of the real developmental trend. Through interviews with representatives of the main trade associations (Federalberghi, AICA, and others) we have learned that 11 new hotels are planned for the Milan area alone in the next three years (mainly upper category) and another 9 facilities along the Sempione-Malpensa axis. Trends in investment confirm the growth trend delineated above. This means that from 2005 to 2015 we expect to see hotel beds increase from 264,000 to 291,000 and lodging capacity in complementary facilities to increase from 248,000 to 300,000. The overall estimate for the Expo 2015 macro-area therefore sees accommodation capacity increasing from 510,000 to over 590,000 guests.

Area	Province	Hotel capacity (2005)	Compounded average growth rate (CAGR)	Hotel capacity (2015)	Complementary facility capacity (2005)	Compounded average growth rate (CAGR)	Complementary facility capacity (2015)	Total accommodation capacity (2015)	Guest-nights during Expo 2015 (May-Oct 2015)
Milan	Milan	67,254		74,290	3,291		4,012	78,302	14,329,390
Northern sector	Como	12,035		13,294	15,288		16,636	31,930	5,840,211
	Lecco	3,290		3,634	8,266		10,076	13,710	2,508,006
	Varese	7,304		8,068	7,529		9,178	17,246	3,156,012
	Verbania	13,325		14,719	22,075		26,909	41,628	7,617,996
	Lugano	9,556		10,554	-		-	10,554	1,931,706
Southern sector	Lodi	1,630		1,801	55		67	1,868	341,787
	Pavia	4,685		5,175	1,265		1,542	6,717	1,229,244
	Piacenza	3,635		4,015	3,309		4,034	8,049	1,472,959
	Parma	13,301	1%	14,693	5,328	2%	6,495	21,187	3,877,201
Eastern sector	Bergamo	11,934		13,183	8,872		10,815	23,997	4,391,539
	Brescia	33,875		37,419	55,394		67,526	104,945	19,204,984
	Verona	36,962		40,829	75,011		91,438	132,267	24,204,387
Western sector	Novara	5,185		5,272	23,079		28,133	33,861	6,196,497
	Vercelli	2,089		2,308	9,874		12,036	14,344	2,624,935
	Alessandria	6,274		6,930	2,634		3,211	10,141	1,855,805
	Asti	1,750		1,933	3,110		3,795	5,728	1,048,191
	Turin	29,446		32,527	3,252		3,965	36,429	6,678,053
TOTAL		263,530		291,101	247,637		301,848	592,949	108,510,362

Table 12.13 – Development of accommodation capacity (2015 estimate)
Source: Tourism Department of Università Bocconi based on Regione Lombardia and ISTAT data

12.1.2 Specific investments for enhancing accommodation capacity in the Milan area

As we have seen, the current and projected accommodation capacity of Milan and the neighbouring areas included in our study will easily absorb the expected influx of visitors to Expo 2015. However, we believe **that greater emphasis should be given to accommodations in Milan oriented to families and young people.** Not only will this facilitate these segments in visiting the Expo, it will also provide them with incentives to visit the Milan area at a later time. We believe it is important **to incorporate a two-pronged strategy into planning improvements to accommodation facilities**:

1. **conservation of Milan's historic, present and future identity;**
2. **environmental, social and economic sustainability.**

While needing to respond to the demand generated by the Expo, accommodation facilities will have to be planned in such a way that they will not upset normal market dynamics. The aim instead will be to enhance Milan's current abilities to attract and accommodate tourists, with the overall goal of making the city both more beautiful and more hospitable.
Planners and designers must thus not only address the issues of conserving the identity of the buildings and areas involved in the Expo and rendering justice to the city's vocation for design (the city may find new vitality as a workshop for budding talent), they must also plan new investments in accommodation capacity as follows:

- **Expo/post-Expo accommodations** to enhance the city's attractiveness and hospitality (investments in new accommodations that will meet the needs of the Expo and later be converted to other functions serving the needs of the city);

- **temporary accommodations exclusively for the Expo period:** ad hoc facilities will be designed for the peak periods, such as a pavilion on Expo premises to accommodate young people. Policy incentives will also be developed to favour temporary B&B accommodations to supplement the more permanent structures. There are a number of interesting examples to evaluate in this regard, such as those being implemented for Expo 2008 in Zaragoza, which might provide benchmarks in planning for Expo 2015.

In particular, **the following infrastructure is planned**:

- **current private sector planning**: the major hotel associations have plans to build some **31 new hotels** accommodating a total of 8,200 additional guests. Should Milan's bid for Expo 2015 become a concrete reality, these development plans may be revised in favour of even greater capacity;

- **development of specific accommodation capacity:**

  - increase **youth hostel** capacity: in addition to the renovation of the current Hostel (approx. 300 beds), a new 200-bed hostel is planned. There are also plans to supplement this latter structure with an additional 200-bed unit that will be used as a permanent student dormitory after the Expo;

  - a very interesting project is the **renovation of 4 publicly-owned farmhouses** for agricultural tourism uses (accommodation for approximately 100 guests);

  - the **conversion of one or more publicly-owned, historic palazzi**, currently used for other functions, **into charming hotels** along the lines of the Paradores in Spain (for a total of 200 beds) constitutes a further opportunity to create a diversity of lodging options to satisfy a demanding clientele who would still like to keep their spending within limits;

  - Milan already has a large campground, but there are plans for a **new campground** on the outskirts in a position offering easy access to both the city centre and the Expo. The facility is expected to accommodate approximately 700 persons;

  - **renovation of one- or two-star hotels** of relevance to Milan's identity, perhaps involving budding new talents in architecture and design;

- **development of accommodation capacity intended for other purposes after the Expo:**

  - construct a 2,000-bed **Expo Village** that will be converted to other uses after the Expo, such as university lodging for instructors, researchers, or managers involved in attracting talent;

  - build **temporary rental apartments** to increase Expo accommodation capacity while also providing the city with structures of long-term strategic value along the lines of the French model (university housing, housing for family members of hospitalised patients, housing for young couples);

- **development of temporary accommodation facilities exclusively for the period of the Expo:**

  - a "**Youth Village**" will be created as part of the structures of the Expo area. This will be a temporary pavilion set up to supplement accommodation facilities for students and other young visitors. One option would be to hold an international design contest for young designers to come up with the winning interior design plan. This contest could also be a vehicle for promoting the Expo itself. Milan has a great deal of experience in drawing in a broad array of established and emerging design talents in association with some of its pre-eminent events such as the Salone del Mobile. And naturally, everything will be done in the name of ecological sustainability. For example, particular care will be dedicated to the use of recycled and recyclable materials in building the pavilion;

  - **Bed & Breakfast project** to augment Expo accommodation capacity;

  - **"Organised hospitality":** To take better advantage of the accommodation potentials and attractions of Lombardy and the surrounding regions, an **agreement with tour operators** is being developed to create special travel packages for strategic tourist destinations: Lakes-Expo, Sea-Expo, Alps-Expo, Florence-Expo-Venice (and vice versa), Rome-Expo, etc., and packages for day trips from neighbouring countries. Of course, ad hoc Expo tourism packages will also be developed.

The Milan Public Administration intends to support plans for an increase in accommodation capacity through the conversion of a number of city-owned facilities and areas.

All accommodation capacity development will adhere to environmental sustainability criteria. The city of Milan intends to be an experimental workshop in the Sustainable Energy Europe programme and a model city in the European Commission's Concerto Initiative.

12.

12.2 Pricing

The assessment of price ranges is a difficult issue in that we must account for the current pricing level and inflationary trends on the supply side, and also for tourist spending power on the demand side. **Supply side**: we have carried out a direct investigation of lodging prices in our study area. An average price has been determined on the basis of prices for 5 accommodation facilities in each category and for each province taken from the Regional hotel catalogue[3].

In order to get a more precise idea of future prices, we need to consider projected inflation rates, which may be estimated at 2.5% per year. Accounting for the fact that accommodation costs often increase at a rate slightly higher than the general average inflation rate, we may assume a rate of 3% per year. We must also consider the fact that hotel management tends to increase prices by an average of 5-10% during major events and tradeshows.
Table 12.14 illustrates the current price ranges for the different hotel categories for each province in the macro-area.

Province	4 star				3 star				2 star				1 star			
	Single room min and max		Double room min and max		Single room min and max		Double room min and max		Single room min and max		Double room min and max		Single room min and max		Double room min and ma	
Bergamo	94	134	151	230	50	68	71	92	38	42	57	65	27	29	47	50
Brescia	84	133	116	198	46	72	64	97	35	49	54	70	27	31	39	44
Como	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Lecco	104	152	152	186	48	54	77	90	30	37	51	60	34	37	49	50
Lodi	63	163	108	204	67	68	93	94	50	51	73	76	36	36	60	60
Milan	151	237	197	297	92	126	121	173	53	70	79	105	40	54	52	73
Pavia	88	88	122	131	51	51	72	77	39	39	58	60	32	32	48	48
Varese	104	146	129	197	72	87	101	119	46	53	63	71	35	36	51	54
Novara	130	140	184	198	58	65	84	91	33	33	50	56	32	40	51	58
Alessandria	87	113	131	166	48	55	73	84	35	36	53	55	31	32	45	46
Vercelli	90	140	118	187	51	62	74	85	26	38	53	55	26	30	51	61
Asti	122	140	173	192	66	68	98	102	38	38	59	59	38	38	59	59
Turin	138	198	179	234	72	88	97	113	41	46	56	61	35	38	54	55
Verona	71	142	115	221	51	84	71	128	42	53	57	77	31	42	49	64
Average	102	148	144	203	60	73	84	103	40	45	59	67	33	37	50	56

Table 12.14 - Average lodging costs for hotels by province and category (2007)
Source: Tourism Department of Università Bocconi
Note: since there is a limited number of 5-star hotels, a reliable sample could not be obtained. On the average, the minimum price for these facilities exceeds €180 per night

3 A single hotel was used to determine the price for the 5-star category

Province	Average daily spending for "hotels and tourist villages"
Bergamo	171 €
Brescia	140 €
Como	167 €
Lecco	111 €
Lodi	157 €
Milan	183 €
Pavia	89 €
Varese	179 €
Lombardy	150 €
Average	150 €

Tabella 12.15 – Average daily spending for "hotels and tourist villages" by foreign tourists in the period 2001-2004
Source: UIC data

With the above assumptions about price increases, we may assume that the prices reported in Table 12.14 for the year 2007 may increase by some 30% by 2015, with the highest increases in Milan. **In any case, the distribution of price ranges is quite varied to meet a wide range of budgetary and service needs**. Negotiations are underway with tour operators and hotel operators to develop specific agreements, which will be signed immediately if Milan is awarded the Expo, to keep prices under control.

Demand side: an analysis has been made of average lodging prices paid by tourists on the basis of data provided by the Ufficio Italiano Cambi (UIC), which surveys and itemises tourism spending by foreigners in Italy each year.
Dividing the spending data under the "hotels and tourist villages" item by the number of guests, we obtain a figure for the average expenditure in each province as illustrated in the following table.

Average spending of €150 may seem high. However, we must consider the fact that the UIC only surveys foreign tourists, some of whom have a high spending potential (typically Japanese and Americans) and thus tend to opt for high level lodgings.

The data show significant variations from one province to the next in terms of the nationalities of tourists. Brescia, for example, has a significant proportion of Germans who come to visit the lakes. Milan and Como, on the other hand, are characterised by a higher presence of Americans and Japanese tourists.

The average spending by tourists corresponds to the price ranges for three-star and four-star hotels, which are the most popular among tourists in Lombardy. Hence the current pricing level is compatible with tourist spending capacities.

12.3 The Expo Village for staff

Expo staff members, and in particular Expo organisational and participant country staff, estimated at 2,000 people, may be lodged in two dedicated facilities:

- the Expo Village, which has been made possible thanks to an agreement with the owner and developer of the Expo area. The Village will be erected on a site approximately 600-700 metres from the main Expo site. A direct road link is planned to allow fast shuttle bus service between the Village and the Expo.

  The Village will contain lodgings exclusively for Expo staff both in the preparatory phases leading up to the event and during Expo 2015 itself. The Village will provide lodging for approximately 2,000 people and include food services and other facilities;

- the Expo Milano Tower will offer an additional 500 beds for diplomatic and organisational staff, journalists (who will thus be lodged in the building housing the International Media Centre) and representatives of the public authorities.

Eco Village, an international benchmark for Milanese quality

Plans call for the creation of an ecologically sustainable village representing an international showcase for eco-compatible design. At the conclusion of Expo 2015, the Village will remain as an additional asset for the City of Milan, which can use it for residential purposes.

The following criteria have been integrated into the design for the eco-sustainable Village:

A. cohousing plan;
B. energy from renewable resources;
C. "smart" systems for rationalisation of energy consumption;
D. use of ecologically sustainable materials;
E. broadband wireless access;
F. sharing of electrical vehicles.

Cohousing is a type of collaborative residential community sharing common service facilities. Originating in Scandinavia and catching on quickly in Holland, Britain, the United States, Canada, Australia and Japan, it has now reached the Milan area. Cohousing communities combine the autonomy of private dwellings with the advantages of common areas and facilities (for example, childcare services, tool rooms, shared automobiles, fitness facilities, guest rooms, vegetable gardens, etc.) offering advantages in terms of both social life and environmental impact. The Expo Village will be modelled on this type of residential development, with a mixture of private spaces (individual dwellings) and common areas (shared services and facilities).

Ecologically sustainable construction techniques will be applied where possible, including roadways and paved areas. Some of the innovative materials planned for use in the Village are listed below:

a) PERS (Porous Elastic Road Surface)

PERS is a road surface made using rubber chips bound by urethane resin instead of pressed stones in an asphalt matrix. The rubber is obtained from discarded tyres and thus constitutes a form of recycling. PERS has excellent water drainage characteristics, absorbs vibrations and reduces traffic noise, and prevents freezing of the road surface.

b) Photovoltaic paint

Based on nanotechnology, these paints convert solar radiation into electricity. Photovoltaic paints have a number of attractive features, including the fact that they produce electricity even under cloudy skies and outperform currently used photovoltaic panels by a factor of five.

c) Wood-chip pavement

These surfaces are made using wood chips that would otherwise be sent to the incinerator. In addition to being ecologically compatible, they are elastic and pleasant to the touch. They are thus an ideal material for outdoor paths for pedestrians or joggers. They may also be applied as an interior soundproofing material.

d) Smog-eating paint

This paint is composed of nanoparticles in a special porous silicon matrix. Applied to exterior walls, the paint acts as a giant sponge absorbing pollutants such as nitrogen oxides and carbon dioxide. The pollutants can then easily be washed away by a simple jet of water.

Technologies to reduce and rationalise energy consumption will also be applied:

- paints based on nanotechnologies that capture solar radiation and covert it to heat;
- rainwater catchment systems to provide water for non-potable uses;
- PLC-controlled charging point for electrically powered, shared-use mopeds and cars, and energy-saving lighting systems.

12.4 Expo visitor accommodation capacity

The event is estimated by Università Bocconi to attract some 21 million visitors, of whom 7,3 million will come from northern Italy (Area 1) and thus not require lodging[4]. **The visitors requiring lodging will come from Area 2 (central and southern Italy) and Area 3 (other countries)** and are estimated at 13,7 million[5]. **Considering an average stay of 2.5 days, 13,7 million visitors will generate an accommodation demand of 34 million guest-nights**[6]. The estimate of 13,7 million visitors includes normal tourism in the Province of Milan, whereas for the other provinces in the Expo accommodation area we have subtracted ordinary tourism flows from the lodging capacity. The available guest-nights in provinces other than Milan have been calculated for each province by multiplying the accommodation capacity by the length of the Expo (183 days) to produce the potentially available guest-nights. The guest-nights attributable to ordinary tourism are then subtracted from this total for each province other than Milan in order to estimate the number of guest-nights available to accommodate the Expo visitors. This figure has been calculated for the year 2015, using the hypothesis that the growth rate of demand is proportional to the growth rate in accommodation capacity. Details are provided in Tables 12,16 and 12.17.

		(2005)	growth rate (CAGR)	(2015)	capacity (2005)	growth rate (CAGR)	capacity (2015)	during Expo 2015 (May-Oct 2015)
Milan	Milan	-		-	-		-	-
Northern sector	Como	1,611,158		1,779,721	583,772		711,615	2,491,336
	Lecco	304,914		336,815	284,126		346,348	683,163
	Varese	892,148		985,486	259,793		306,496	1,289,983
	Verbania	978,192		1,080,533	974,815		1,188,294	2,268,827
	Lugano	1,520,750		1,679,854	-		-	1,679,854
Southern sector	Lodi	175,996		194,408	760		928	195,336
	Pavia	435,334		480,880	41,495		50,582	531,462
	Piacenza	244,851	1%	270,468	136,878	2%	166,854	437,321
	Parma	890,403		983,780	178,891		218,067	1,201,847
Eastern sector	Bergamo	1,113,240		1,229,710	365,889		446,017	1,675,726
	Brescia	5,398,981		5,963,834	4,818,750		5,874,029	11,837,863
	Verona	5,469,738		6,041,994	9,967,517		12,150,348	18,192,341
Western sector	Novara	571,312		631,636	477,382		581,926	1,213,562
	Vercelli	141,365		156,885	134,241		163,643	320,369
	Alessandria	452,880		500,261	80,539		98,177	598,438
	Asti	113,847		125,758	98,644		120,246	246,004
	Turin	2,719,864		3,004,411	536,220		653,649	3,658,060
	TOTAL	23,034,163		25,444,203	18,929,702		23,075,238	48,521,671

Table 12.16 – Development of guest-night demand (2015 estimate)
Source: Tourism Department of Università Bocconi based on Regione Lombardia and ISTAT data

4 Since Area 1 visitors are not likely to require lodging, they have been excluded from the assessment of accommodation demand

5 Visitors from Area 2 could conceivably travel by air and make day trips to the Expo. However we have chosen to disregard this possibility in our estimate of lodging demand

6 A "guest-night" is defined a one-night stay by one guest

Area	Available guest-nights (May-Oct 2015)	Guest-nights consumed by total tourism demand (May-Oct 2015)	Residual capacity (guest-nights) for Expo 2015	Italian and foreign visitors requiring lodging	Average stay (nights)	Guest-nights consumed by Expo 2015	Residual capacity (guest-nights available to meet peak demand)	% residual capacity (guest-nights available to meet peak demand)
Milan	14,329,260	-	14,329,260					
Northern sec.	21,057,930	8,413,162	12,644,769					
Southern sec.	6,921,261	2,365,966	4,555,295		2,50			
Eastern sec.	47,801,398	31,705,931	16,095,460					
Western sec.	18,403,520	6,036,413	12,367,107					
TOTAL	108,513,362	48,521,471	59,991,891	13,721,673		34,304,182	25,687,709	43%

Table 12.17 – Summary of capacity to meet lodging demand generated by Expo 2015 (2015 estimate)
Source: Tourism Department of Università Bocconi based on Regione Lombardia and ISTAT data

As illustrated above, the total residual guest-night capacity in the Expo-support area amounts to nearly 60 million, easily accommodating the projected Expo demand of 34 million. The excess (over 25 million guest-nights or 43% of available capacity after ordinary tourism demand has been factored out) provides a great deal of flexibility for handling peak visitor flows during Expo Milano 2015.

We emphasise the fact that the accommodation capacity outlined above is already largely available in Milan and the surrounding territory, and that the capacity to absorb Expo Milano 2015 peak demand is fully compatible with the hospitality sector development plan.

12.5 Connections to accommodation facilities

The geographical distribution of accommodation facilities tends to follow the layout of airport, road and rail access. Brescia is near the Bergamo Orio Al Serio airport, Como and Varese are close to the Malpensa airport, and Milan is served not only by the Linate airport, but is also within easy access distance of the Bergamo Orio Al Serio airport and the Malpensa airport.

With regard to rail access, a significant portion of Milanese accommodations (approx. 20%) are located near the Central Station, with another 25% or more located near the two fairgrounds or along the axis represented by Corso Sempione.