

3.0 POPULATION AND LAND USE

The analysis of population will focus on its present size and growth, past trends and distribution. Since population relates to both land use allocation and provision of socio-economic needs and services, its analysis cannot be divorced from the other input studies in the other chapters.

3.1 Population: Levels, Growth, Distribution and Movements

3.1.1. Levels and Growth

The preliminary results of the 2000 Census puts the population of Pasay City at 363,000, which represents a reduction of about 2.34% from its 1995 population. Since the 1903 census, Pasay's population growth had been greater than the rest of Metro Manila only in the years 1918 to 1948 (Table 3.1.). The rest of the census years showed Pasay growing more slowly than the rest of Metro Manila. Population growth was only decelerating until 2000, which saw actual reduction. The decelerating trend implied other areas in Metro Manila became more attractive as settlement areas than Pasay City (e.g., Makati, Paranaque). The actual reduction implied it has become an out-migration area. Among the 17 localities in the National Capital Region (NCR), Pasay City ranked 12th in population size, 11th in number of households, 13th in average household size (which is less than NCR's 4.62), 16th in annual growth and 4th in population density (more than the density of NCR).

3.1.2. Distribution

Pasay City was among the most congested localities in NCR with a population density of 25,533 in 2000. This population density was far greater than the NCR's 15,617 density. The city has 201 barangays which resemble those of the old cities like Manila and Kalookan. Out of these barangays, Barangay 183 had the biggest population 29,450 or about 8.3% of the total city population (Table 3.4). It is followed by Barangays 201, 184, 193, and 145 with more than 2% each in population share. The smallest barangays are Barangays 35, 36 and 78 with less than 240 population. Average household size (AHHS) in 1995 was about 4.7 in the city and growth from 1995 was about negative 9%. Barangay 17 had the highest AHHS with 6.57 while Barangay 30 had the smallest with 3.3. In terms of growth, the highest were Barangays 15, 17, 11,12 and 5 with more than a hundred percent growth from 1995.

3.1.3. Movements

Based on the latest available census data on population movements (1990), Pasay qualifies as a net-in-migration area (Table 3.2 and Table 3.3). Estimated net migration rate is about 3.14 persons for every 1,000 population during the 1985-1990 period. This would have probably changed in 2000 since there was an actual reduction in population. The slightness of the net migration rate means it is quite susceptible to change during the succeeding census years of 1995 and 2000. Based on the available data of 1990, in-migrants average 141 per 1,000 population while out-migrants were about 138 per 1,000 population. Most of the in-migrants were females.

Table 3.1

Population of Pasay City 1903-2000, with Annual Growth Rates Compared with Metro Manila

Census Year	Population	Annual Growth Rate (%)	Metro Manila's Annual Growth Rate (%)
1903	8,201	-	-
1918	18,697	5.65%	2.28%
1939	55,161	5.29%	3.72%
1948	88,728	5.42%	5.20%
1960	132,673	3.41%	3.83%
1970	206,283	4.51%	4.88%
1975	254,999	4.33%	4.61%
1980	287,770	2.45%	3.58%
1990	368,366	2.50%	2.98%
1995	408,610	2.10%	3.53%
2000	363,000	-2.34%	2.11%

Source: National Statistics Office

**Table 3.2
Household Population 5 Years Old and Over by Sex
Place of Residence 5 Years Ago of Pasay City, 1990**

Sex, Place of Residence and City/Municipality	Household Population 5 Years Old And Over	Place of Residence 5 Years Ago				
		Same City/ Municipality	Other City/ Municipality Same Province	Other Province	Foreign Country	Unknown
	(1)	(2)	(3)	(4)	(5)	(6)
Pasay	318,866	269,975	7,352	35,050	487	6,002
Male	155,623	133,225	3,463	15,756	314	2,865
Female	163,243	136,750	3,889	19,294	173	3,137

Source: National Statistics Office

**Table 3.3
Computation of Net Migration, 1990**

Items	Computation	Formulas
In-Migrants	48,891	Cols. 3+4+5+6
Male	22,398	
Female	26,493	
Out-Migrants And Deaths	55,609	1985 Pop Minus Col 2
Estimated Average Crude Death Rate	4.5	
Deaths 1985-1990	7,807	(Average Pop 1985 & 1990)/1000*Crude Death Rate*5 Years
Out-Migrants	47,802	Out-Migrants And Deaths Minus Deaths
1985 Estimated Population	325,584	
1990 Population	368,366	
Average Population 1985 & 1990	346,975	
Net Migration Rate	3.14	In-Migrants Minus Out-Migrants * 1000

**Table 3.4
Population and Number of Households of Pasay City by Barangay, 2000**

Barangay	Total Population	Household Population	Number Of Household	Growth 1995-2000	% Share 2000	Average HH Size
PASAY CITY	354,908	353,798	78,180	-13%	100.00%	4.53
Barangay 1	759	759	177	18%	0.21%	4.29
Barangay 2	1,459	1,459	346	-17%	0.41%	4.22
Barangay 3	1,207	1,207	268	-3%	0.34%	4.50
Barangay 4	2,147	2,147	457	4%	0.60%	4.70
Barangay 5	1,604	1,603	365	117%	0.45%	4.39
Barangay 6	365	365	85	-35%	0.10%	4.29
Barangay 7	931	931	212	23%	0.26%	4.39
Barangay 8	1,641	1,641	390	-19%	0.46%	4.21
Barangay 9	351	350	83	-27%	0.10%	4.22
Barangay 10	1,198	1,164	260	-22%	0.34%	4.48
Barangay 11	1,784	1,784	367	487%	0.50%	4.86
Barangay 12	2,409	2,409	551	342%	0.68%	4.37
Barangay 13	1,247	1,247	231	17%	0.35%	5.40
Barangay 14	4,250	4,241	881	-34%	1.20%	4.81
Barangay 15	891	891	225	596%	0.25%	3.96
Barangay 16	284	284	66	-55%	0.08%	4.30
Barangay 17	271	271	77	489%	0.08%	3.52
Barangay 18	1,287	1,287	250	-43%	0.36%	5.15
Barangay 19	493	493	103	-17%	0.14%	4.79
Barangay 20	405	405	97	-37%	0.11%	4.18
Barangay 21	609	609	141	-38%	0.17%	4.32
Barangay 22	599	599	152	-48%	0.17%	3.94
Barangay 23	1,627	1,627	388	-12%	0.46%	4.19
Barangay 24	664	664	167	-40%	0.19%	3.98
Barangay 25	375	370	93	-66%	0.11%	3.98
Barangay 26	665	665	166	-34%	0.19%	4.01
Barangay 27	387	387	77	-40%	0.11%	5.03
Barangay 28	959	959	219	-25%	0.27%	4.38
Barangay 29	1,710	1,710	407	-30%	0.48%	4.20
Barangay 30	862	862	182	-33%	0.24%	4.74
Barangay 31	1,089	1,089	226	-41%	0.31%	4.82
Barangay 32	1,324	1,324	248	-26%	0.37%	5.34
Barangay 33	711	711	169	-1%	0.20%	4.21
Barangay 34	1,033	1,033	222	-8%	0.29%	4.65
Barangay 35	236	227	63	-27%	0.07%	3.60
Barangay 36	235	235	42	-59%	0.07%	5.60
Barangay 37	671	671	159	-45%	0.19%	4.22
Barangay 38	1,479	1,479	385	-41%	0.42%	3.84
Barangay 39	1,411	1,407	297	-7%	0.40%	4.74
Barangay 40	1,809	1,783	378	-27%	0.51%	4.72
Barangay 41	863	861	171	-27%	0.24%	5.04
Barangay 42	1,326	1,326	339	-32%	0.37%	3.91
Barangay 43	2,029	2,029	482	-15%	0.57%	4.21
Barangay 44	1,262	1,260	289	-26%	0.36%	4.36
Barangay 45	1,148	1,148	223	-8%	0.32%	5.15
Barangay 46	4,509	4,509	868	-25%	1.27%	5.19
Barangay 47	984	967	197	-21%	0.28%	4.91
Barangay 48	525	523	103	-18%	0.15%	5.08
Barangay 49	318	314	75	-37%	0.09%	4.19

Table 3.4
Population and Number of Households of Pasay City by Barangay, 2000 (Continuation)

Barangay	Total Population	Household Population	Number Of Household	Growth 1995-2000	% Share Population	Average HH Size
Barangay 50	560	554	119	-25%	0.16%	4.66
Barangay 51	1,953	1,953	397	-24%	0.55%	4.92
Barangay 52	1,758	1,758	337	10%	0.50%	5.22
Barangay 53	689	689	134	-3%	0.19%	5.14
Barangay 54	1,437	1,436	278	-17%	0.40%	5.17
Barangay 55	664	664	182	-20%	0.19%	3.65
Barangay 56	602	602	151	-32%	0.17%	3.99
Barangay 57	1,788	1,788	373	17%	0.50%	4.79
Barangay 58	1,829	1,829	414	-16%	0.52%	4.42
Barangay 59	913	849	201	-13%	0.26%	4.22
Barangay 60	1,393	1,383	285	-8%	0.39%	4.85
Barangay 61	2,157	2,157	379	-19%	0.61%	5.69
Barangay 62	1,054	1,054	229	-16%	0.30%	4.60
Barangay 63	510	510	114	-33%	0.14%	4.47
Barangay 64	1,643	1,643	320	-11%	0.46%	5.13
Barangay 65	2,888	2,888	628	-1%	0.81%	4.60
Barangay 66	2,488	2,488	507	-20%	0.70%	4.91
Barangay 67	1,404	1,404	301	-23%	0.40%	4.66
Barangay 68	616	585	122	2%	0.17%	4.80
Barangay 69	1,146	1,106	270	23%	0.32%	4.10
Barangay 70	1,000	818	174	-5%	0.28%	4.70
Barangay 71	619	619	132	-2%	0.17%	4.69
Barangay 72	1,221	1,221	260	-25%	0.34%	4.70
Barangay 73	1,006	1,006	234	-40%	0.28%	4.30
Barangay 74	499	496	144	-27%	0.14%	3.44
Barangay 75	795	785	198	-46%	0.22%	3.96
Barangay 76	1,823	1,796	472	-78%	0.51%	3.81
Barangay 77	1,667	1,667	333	-26%	0.47%	5.01
Barangay 78	230	230	47	-60%	0.06%	4.89
Barangay 79	553	546	126	-33%	0.16%	4.33
Barangay 80	756	756	137	-20%	0.21%	5.52
Barangay 81	486	486	100	-50%	0.14%	4.86
Barangay 82	358	358	80	-39%	0.10%	4.48
Barangay 83	608	608	132	-38%	0.17%	4.61
Barangay 84	535	535	110	-28%	0.15%	4.86
Barangay 85	1,208	1,208	250	27%	0.34%	4.83
Barangay 86	702	702	155	-57%	0.20%	4.53
Barangay 87	515	515	117	0%	0.15%	4.40
Barangay 88	911	911	209	-11%	0.26%	4.36
Barangay 89	465	405	95	-45%	0.13%	4.26
Barangay 90	969	969	227	-42%	0.27%	4.27
Barangay 91	1,040	1,037	227	-11%	0.29%	4.57
Barangay 92	319	319	88	-6%	0.09%	3.63
Barangay 93	453	453	93	12%	0.13%	4.87
Barangay 94	1,685	1,685	351	-34%	0.47%	4.80
Barangay 95	1,484	1,484	309	15%	0.42%	4.80
Barangay 96	825	825	159	0%	0.23%	5.19
Barangay 97	1,230	1,230	267	-13%	0.35%	4.61
Barangay 98	847	847	185	-31%	0.24%	4.58
Barangay 99	986	986	220	-34%	0.28%	4.48
Barangay 100	835	835	202	-28%	0.24%	4.13

Table 3.4
Population and Number of Households of Pasay City by Barangay, 2000 (Continuation)

Barangay	Total Population	Household Population	Number Of Household	Growth 1995-2000	% Share Population	Average HH Size
Barangay 101	350	350	58	36%	0.10%	6.03
Barangay 102	566	566	117	-35%	0.16%	4.84
Barangay 103	666	665	135	-13%	0.19%	4.93
Barangay 104	954	949	192	-4%	0.27%	4.94
Barangay 105	468	468	100	-23%	0.13%	4.68
Barangay 106	1,167	1,167	238	1%	0.33%	4.90
Barangay 107	1,789	1,748	411	-8%	0.50%	4.25
Barangay 108	1,893	1,893	387	-6%	0.53%	4.89
Barangay 109	1,002	1,002	218	-6%	0.28%	4.60
Barangay 110	1,853	1,853	341	-6%	0.52%	5.43
Barangay 111	1,067	1,067	215	-17%	0.30%	4.96
Barangay 112	581	581	120	10%	0.16%	4.84
Barangay 113	1,860	1,860	409	3%	0.52%	4.55
Barangay 114	712	712	157	-23%	0.20%	4.54
Barangay 115	1,248	1,248	261	12%	0.35%	4.78
Barangay 116	1,063	1,053	222	-29%	0.30%	4.74
Barangay 117	954	954	212	-38%	0.27%	4.50
Barangay 118	1,814	1,810	408	-3%	0.51%	4.44
Barangay 119	1,202	1,202	273	-29%	0.34%	4.40
Barangay 120	418	418	97	-33%	0.12%	4.31
Barangay 121	1,112	1,112	247	-14%	0.31%	4.50
Barangay 122	1,229	1,229	262	1%	0.35%	4.69
Barangay 123	1,277	1,277	256	-23%	0.36%	4.99
Barangay 124	1,423	1,423	289	-12%	0.40%	4.92
Barangay 125	1,432	1,432	317	10%	0.40%	4.52
Barangay 126	693	693	148	-37%	0.20%	4.68
Barangay 127	1,823	1,823	364	-12%	0.51%	5.01
Barangay 128	1,144	1,132	238	1%	0.32%	4.76
Barangay 129	997	997	219	14%	0.28%	4.55
Barangay 130	3,040	3,010	684	-3%	0.86%	4.40
Barangay 131	1,145	1,145	238	-23%	0.32%	4.81
Barangay 132	2,620	2,620	500	21%	0.74%	5.24
Barangay 133	2,097	2,097	447	-2%	0.59%	4.69
Barangay 134	1,776	1,742	364	-18%	0.50%	4.79
Barangay 135	2,516	2,516	638	28%	0.71%	3.94
Barangay 136	1,626	1,626	403	-23%	0.46%	4.03
Barangay 137	2,296	2,296	516	-20%	0.65%	4.45
Barangay 138	1,519	1,519	366	73%	0.43%	4.15
Barangay 139	749	746	180	-25%	0.21%	4.14
Barangay 140	613	613	142	-22%	0.17%	4.32
Barangay 141	692	692	142	-43%	0.19%	4.87
Barangay 142	652	647	146	40%	0.18%	4.43
Barangay 143	3,807	3,807	908	27%	1.07%	4.19
Barangay 144	3,200	3,173	750	-6%	0.90%	4.23
Barangay 145	7,104	7,104	1,552	-4%	2.00%	4.58
Barangay 146	619	619	140	-28%	0.17%	4.42
Barangay 147	1,824	1,824	397	-28%	0.51%	4.59
Barangay 148	3,158	3,158	656	-11%	0.89%	4.81
Barangay 149	374	368	89	-25%	0.11%	4.13
Barangay 150	605	605	165	20%	0.17%	3.67
Barangay 151	784	784	181	2%	0.22%	4.33

Table 3.4

Population and Number of Households of Pasay City by Barangay, 2000 (Continuation)

Barangay	Total Population	Household Population	Number Of Household	Growth 1995-2000	% Share Population	Average HH Size
Barangay 152	1,147	1,147	272	12%	0.32%	4.22
Barangay 153	1,376	1,376	299	-31%	0.39%	4.60
Barangay 154	871	871	186	58%	0.25%	4.68
Barangay 155	1,090	1,085	235	32%	0.31%	4.62
Barangay 156	3,142	3,142	652	-9%	0.89%	4.82
Barangay 157	2,010	2,010	419	-27%	0.57%	4.80
Barangay 158	517	493	105	-30%	0.15%	4.70
Barangay 159	1,290	1,290	309	-17%	0.36%	4.17
Barangay 160	937	906	232	9%	0.26%	3.91
Barangay 161	2,083	2,029	524	-3%	0.59%	3.87
Barangay 162	1,278	1,278	281	-9%	0.36%	4.55
Barangay 163	897	897	203	-40%	0.25%	4.42
Barangay 164	1,525	1,525	342	-16%	0.43%	4.46
Barangay 165	3,646	3,646	803	15%	1.03%	4.54
Barangay 166	1,023	1,023	280	-23%	0.29%	3.65
Barangay 167	668	668	143	-11%	0.19%	4.67
Barangay 168	496	496	102	-11%	0.14%	4.86
Barangay 169	2,714	2,689	660	1%	0.76%	4.07
Barangay 170	1,869	1,869	382	-1%	0.53%	4.89
Barangay 171	2,969	2,969	692	-1%	0.84%	4.29
Barangay 172	4,719	4,718	1,038	-21%	1.33%	4.55
Barangay 173	1,411	1,401	309	-18%	0.40%	4.53
Barangay 174	1,299	1,295	276	-28%	0.37%	4.69
Barangay 175	1,686	1,686	383	-10%	0.48%	4.40
Barangay 176	1,532	1,532	334	-14%	0.43%	4.59
Barangay 177	4,956	4,956	1,065	0%	1.40%	4.65
Barangay 178	5,649	5,649	1,067	-21%	1.59%	5.29
Barangay 179	5,072	5,071	1,107	-8%	1.43%	4.58
Barangay 180	1,887	1,887	396	-18%	0.53%	4.77
Barangay 181	2,474	2,474	474	-6%	0.70%	5.22
Barangay 182	2,001	2,001	442	5%	0.56%	4.53
Barangay 183	29,450	29,364	6,846	-36%	8.30%	4.29
Barangay 184	9,454	9,343	2,114	-2%	2.66%	4.42
Barangay 185	4,630	4,630	1,043	-22%	1.30%	4.44
Barangay 186	4,645	4,645	959	-5%	1.31%	4.84
Barangay 187	3,971	3,951	931	1%	1.12%	4.24
Barangay 188	1,461	1,461	329	-5%	0.41%	4.44
Barangay 189	1,108	1,108	229	-17%	0.31%	4.84
Barangay 190	4,631	4,631	948	-8%	1.30%	4.89
Barangay 191	3,378	3,378	807	-30%	0.95%	4.19
Barangay 192	4,153	4,153	963	-19%	1.17%	4.31
Barangay 193	7,121	7,121	1,548	-16%	2.01%	4.60
Barangay 194	5,858	5,858	1,450	7%	1.65%	4.04
Barangay 195	1,876	1,876	414	-19%	0.53%	4.53
Barangay 196	1,653	1,653	354	2%	0.47%	4.67
Barangay 197	3,310	3,310	733	-18%	0.93%	4.52
Barangay 198	1,362	1,362	281	-1%	0.38%	4.85
Barangay 199	1,769	1,769	400	-12%	0.50%	4.42
Barangay 200	538	538	111	-31%	0.15%	4.85
Barangay 201*	14,209	14,209	3,200		4.00%	4.44

Source: National Statistics Office

*Created into a barangay under City Ordinance 83-1997; ratified on June 8, 1997; taken from Barangay 183.

3.2 Existing Land Use

There are at least six (6) distinct subdivisions of land and water areas in the present-day Pasay City and these are basically reflective of the history of settlements that evolved within the city over the past 100 to 150 years (Refer to Figure 3.1). These are as follows:

- The Original Settlement Area (OSA) which was generally populated well before the year 1900;
- The Old Reclamation Area (ORA) which was largely settled between 1900 to c. 1950;
- The Original Villamor Air Base Area (OVABA) which was in use from the 1950s to the present;
- The Airport Area (AA) which was developed mainly between 1950 and 1980;
- The New Coastal Reclamation Area (NCRA) which was developed possibly between 1950 and the present; and
- The City Waters Area (CWA) which is the present off-coastal portion of Pasay City at Manila Bay.

The Original Settlement Area (OSA) is generally located between Taft Avenue (which was generally part of the original coastline or the “aplaya” and the swamps) and the Tripa de Gallina (which was used as a waterway for travel and trade to destinations as far north as the present-day Pampanga Province and to destinations as far east as the present-day Rizal Province (via the present-day Pasig River). The OSA is primarily residential - commercial in terms of current land uses and is generally characterized by relatively narrow road rights-of-way (ROWs), small to medium size lot cuts, a very dense residential population and medium to high intensity commercial activities along the key thoroughfares which largely serve local (intra-city) needs.

Among the other important thoroughfares in the OSA are sections of Sen. Gil Puyat Avenue or Circumferential Road 3 (C-3) for the Metropolitan Manila Area (MMA), Antonio S. Arnaiz Avenue (formerly Libertad) and the Epifanio de los Santos Avenue (EDSA) or Circumferential Road 4 (C-4) for the MMA, with all of these key roads linking Pasay City to Makati City; Dominga St., Burgos St., Zamora St., Protacio St., Tramo, etc., linking Pasay City to the City of Manila. Among the key non-residential intra-city or intra-metropolitan destinations in the OSA are the commercial establishments along the roads mentioned. Both the Light Rail Transit (LRT) Line 1 and the EDSA Mass Rapid Transit (MRT) are considered as within the OSA.

The Old Reclamation Area (ORA) is the present area generally located between Roxas Boulevard, i.e., invariably referred to as MMA Radial Road 1 (R-1) and Taft Avenue, i.e., invariably referred to as MMA Radial Road 2 (R-2). The ORA at present is generally characterized by wide to very wide road ROWs, medium to very large size lot cuts, a dense residential population (mix of low to high density upscale residential developments) and high to very high intensity commercial activities along the key thoroughfares which largely serve intra-city, metropolitan and extra-metropolitan (intra-regional) needs. The ORA is predominantly commercial – institutional - residential in character of land use and is the site of a huge number of commercial establishments which cater to many higher order urban functions that make the same key metropolitan destinations.

Among the other important thoroughfares in the ORA are longer sections of Sen. Gil Puyat Avenue or MMA Circumferential Road 3 (C-3), Arnaiz Avenue and EDSA or MMA Circumferential Road 4 (C-4) which all link Pasay City to Makati City, F.B. Harrison – Quirino Avenue and Leveriza – Park Avenue (both linking Pasay City with the City of Manila to the north and Paranaque City to the south). Among the key non-residential intra-city or intra-metropolitan destinations in the ORA are the hotels, dining and entertainment establishments along Roxas Boulevard, the Pasay City Hall along F.B. Harrison Avenue, the Baclaran commercial area particularly the garment centers along Taft Avenue Extension (formerly Mexico Road or the Avenida de Mexico), motels (motor hotels) along Cuneta Avenue and F.B. Harrison Avenue and all other commercial establishments along the roads mentioned.

The Original Villamor Air Base Area (OVABA) is the present area generally located between the South Luzon Expressway or the SLEX, i.e., also the MMA Radial Road 3 (R-3) and Andrews Avenue, which presently separates the Villamor Air Base (home of the Philippine Air Force or the PAF) and the areas controlled by the Bases Conversion Development Authority (BCDA) from the areas controlled by the Manila International Airport Authority (MIAA), i.e., the Ninoy Aquino International Airport (NAIA) - domestic airport – cargo airport – general aviation airport complex. The OVABA is predominantly institutional - residential in land use and is now generally characterized by relatively wide road ROWs, small to medium size lot cuts, a dense residential population and low to very low intensity commercial activities along the key thoroughfares which largely serve metropolitan and extra-metropolitan (regional) needs.

Among the other important thoroughfares in the OVABA are Sales St., and other Villamor Air Base roads which serve non-residential intra-city or intra-metropolitan destinations such as the various PAF offices and the BCDA headquarters office.

The OVABA now has the following key occupants:

- The PAF at areas southeast of Sales Avenue;
- The Philippine International Air Terminals Company (PIATCO) with its NAIA International Passenger terminal (IPT) 3 Project located southwest of Andrews Ave.;
- The BCDA located northeast of Andrews Ave.;
- The Presidential Hangar Area southeast of Sales Ave.;
- The Airmen's Village at areas northeast of Andrews Ave.; and
- The Villamor Golf Course (VGC).

The present-day Villamor Air Base in actual control of the Philippine Air Force (PAF) only consists of PAF areas along Sales Ave. and the VGC. All of the other areas are under separate administrative and physical control by entities other than the PAF, i.e., the BCDA, the MIAA and the LGU of Pasay City.

The Airport Area (AA) is the present area generally bounded by the SLEX/R-3 and the City of Taguig to the east, by Paranaque City to the south and to the west and by Andrews Avenue and portions of the Tripa de Gallina to the north. The AA is the site of the NAIA - domestic airport – cargo airport - general aviation airport complex, i.e., approximately 640 hectares (hectares) in surface area. The AA is predominantly transportation – utilities in land use and its peripheral areas host settlements now generally characterized by narrow to wide road ROWs, medium

to large size lot cuts, residential populations ranging from low to very high densities and medium to high intensity commercial activities along the key thoroughfares which largely serve metropolitan and extra-metropolitan (regional) needs.

Among the other important thoroughfares in the AA are the NAIA Road, the Domestic Road, and the Ninoy Aquino Avenue (linking Pasay City with Paranaque City to the south) and Merville Avenue. Among the key non-residential intra-city or intra-metropolitan destinations in the AA aside from the NAIA - domestic airport – cargo airport - general aviation airport complex are the Nayong Pilipino – Philippine Village Hotel Complex along NAIA Road, the general aviation and cargo air operations facilities along Domestic Road, the DOTC's Light Rail Transit Authority (LRTA) and the LRT Line 1 depot and the Air Transportation Office (ATO) compound and general aviation facilities along both sides of Andrews Avenue and all other commercial establishments along the roads mentioned.

The other important locators-landowners in the AA are as follows:

- The Manila International Airport Authority (MIAA) which operates both IPT 1 (NAIA) and IPT 2 (Centennial);
- The Philippine Airlines (PAL);
 - The Bureau of Customs (BC); and
 - The Bureau of Immigration (BI).

The New Coastal Reclamation Area (NCRA) is the present area generally located between Roxas Boulevard, i.e., the MMA R-1 and the reclamation area coastline along the Manila Bay. The NCRA of Pasay City is part of the estimated 1,500 hectares (hectares) of the Boulevard 2000 Project, i.e., a reclamation project stretching from Pasay City to Cavite Province. The portions of the Boulevard 2000 Project found in Pasay City are two (2) reclaimed islands namely 1) the 130 hectares Cultural Center - Financial Center Area (CC-FCA) and the 180 hectares Central Business Park Island A [CBP-I(A)]. The NCRA is now generally characterized by wide to very wide road ROWs, large to very large size lot cuts, a low residential population and limited but high to very high intensity commercial activities along the key thoroughfares which largely serve intra-city, metropolitan and extra-metropolitan (regional) needs. The NCRA is predominantly institutional/ cultural - commercial – residential in land use and is the site of a huge number of institutional cum cultural and institutional - commercial establishments which cater to many higher order urban functions that make the same key metropolitan destinations.

Among the other important thoroughfares in the NCRA are the Central Boulevard, the partially completed Bay Boulevard and the partially completed Seaside Boulevard (all linking Pasay City with the city of Manila to the north and Paranaque City to the south) and the EDSA Extension to the Boulevard 2000 area. Among the key non-residential intra-city or intra-metropolitan destinations in the NCRA are the hotels, convention facilities, exposition centers, government offices, financial centers and tourism/ cultural establishments within the CC-FCA. The ferry terminal to Bataan which is beside the Tanghalang Francisco Balagtas (former Folk Arts Theater) is also within the NCRA.

The important locators-landowners in the CC-FCA portion of the NCRA are as follows:

- The Cultural Center of the Philippines (CCP);
- The Tanghalang Francisco Balagtas (former Folk Arts Theater);
- The Westin Philippine Plaza Hotel;
- The Philippine International Convention Center (PICC);
- The Film Center;
- The Government Service Insurance System (GSIS) Headquarters Office cum Philippine Senate;
- The Philippine National Bank (PNB) Financial Center;
- The World Trade Center;
- The Department of Trade and Industry (DTI) - PTTC Complex;
- The Coconut Palace;
- The Social Security System (SSS), lot only;
- The Philippine National Construction Corporation (PNCC), lot only;
- The Land Bank of the Philippines (LBP), lot only.

The CBP-I(A) portion of the NCRA now has the following key locators-landowners:

- The Metrobank Group with its Toyota Manila Bay Showroom cum service center, several high-rise residential condominiums presently under construction and a proposed general hospital complex, all forming part of a medium-intensity/density mixed use development;
- The SM Group with its Church of the Way, the Truth and the Life and its proposed Mall of Asia Project, all forming part of a very high intensity/ density mixed use development; and
- The Public Estates Authority (PEA) with about 50.0 hectares of high-intensity/ density mixed use developments.

The City Waters Area (CWA) is the present off-coastal portion of Pasay City at Manila Bay and extends from the seawall of the NCRA up to say 300 – 400 meters offshore. There is still future potential for additional reclamation in this area.

3.3 Key Land Use Planning Issues

3.3.1 Problem Identification in the Land Use Sector

More than fifty percent (50.0%) of land in Pasay City is controlled by agencies of the national government, i.e., the GRP and used for their operations, i.e., MIAA-NAIA, ATO, LRTA, BCDA, PAF, PEA, MRT, DPWH, etc. and not by the local government (reference Figure 3.2 and Table 3.5). The continued operations of these agencies while benefiting the MMA and the public in general has created immense administrative and control problems for Pasay City, particularly in respect to their individual development planning which materially rely on the existing city infrastructure albeit possibly without the requisite prorated contribution for the upkeep and upgrade of such infrastructure.

Table 3.5
Estimated Land Use Distribution of Pasay City, 2001

Land Use Category	Land Area (hectares)	Percent to Total (%)
Residential 1	17.06	0.95

Residential 2 and 3	550.13	30.48
Commercial 1, 2 and 3	66.10	3.66
Industrial	23.45	1.30
Institutional	179.13	9.92
Cultural	14.92	0.83
Tourism	7.51	0.42
Planned Unit Development (PUD)	298.54	16.54
Open Spaces (Road ROW)	136.48	7.56
Cemetery	4.26	0.24
Utilities and Transportation	507.52	28.12
TOTAL	1805.11	100.00

Note: Computed from digitized map, subject to ground survey/confirmation.

Of particular interest is the NCRA which take up about twenty two percent (22.0%) of the total land area and classified under the 1997 zoning ordinance passed by the Pasay City Council as planned unit developments (PUDs). While a PUD has been officially defined by the Housing and Land Use Regulatory Board (HLURB) in its 1996 fourth (4th) revised edition of the Model Zoning Ordinance (MZO) as a land development scheme wherein the project site is comprehensively planned as an entity via a unitary site plan which permits flexibility in planning/ design, building siting, complementarity of building types and land uses, usable open spaces and the preservation of significant land features, the term PUDs may also refer to any type of proposed development that may be initially profitable for its private and/or public developers but which may turn out to be too costly (socially/ environmentally, financially/economically, legally/politically, etc.) for Pasay City in the long run.

Pasay City has long been considered the gateway to both the Calabarzon and southern MMA as it is host to both major international and domestic transportation systems such as the international-domestic-cargo-general aviation airports, EDSA-MRT, LRT Line 1 and a host of on-road and off-road city/provincial bus and jeepney/ mega taxi terminals. Add to this its distinction of hosting establishments which continuously cater to higher order urban functions (and are therefore daily metropolitan destinations) and add further the highly pedestrian character of the EDSA-Baclaran, Taft-Libertad and Taft-Gil Puyat Ave. areas. The chaotic situation that results from the intertwined movements of vehicles and pedestrians alike along all of these public spaces must be rationalized because of the huge economic cost largely in terms of wasted resources, i.e., time and man-hours lost to traffic/ congestion, fuel and vehicle operating costs, land utilization, etc.

In terms of land use classification, the distribution of land uses (ranked according to intensity or severity of use) and the land use conflicts they generate are as follows:

- a. Industrial. Industrial land uses can be found in areas designated by the HLURB under its 1996 MZO as light industrial (I-1), medium industrial (I-2) and heavy industrial (I-3). The existing I-1 and I-2 areas are largely found scattered all over the ORA while virtual I-3 areas can be found in the southern section of the OSA; the environmental pollution and the congestion generated by these sites create major land use conflicts within their largely high density residential host sites;

- b. Commercial. Commercial land uses can be found in areas designated by the HLURB under its 1996 MZO as principally commercial or the central business district (C-1), quasi-commercial/ industrial (C-2) and large shopping malls (C-3). These are largely found in the ORA and in the western and southern sections of the OSA; the environmental pollution and the very high vehicular and pedestrian traffic/ congestion generated by these sites create major land use conflicts with their largely residential neighbors;
- c. Residential. Residential land uses can be found in areas designated by the HLURB under its 1996 MZO as low density (R-1), medium density (R-2), high density (R-3), socialized housing zone (SHZ), townhouses (R-4) and condominiums (R-5). Existing R-1 areas can still be found in small pockets all over the ORA. R-2, R-3 and qualified SHZ areas, all of which generally correspond to locations of Areas for Priority Development (APDs) can be found all over the ORA and in the central, eastern and southern sections of the OSA, the northeastern portion of the OVABA and in the western, southwestern and southeastern portions of the AA (reference Figure 3.3). Existing R-4 and R-5 areas can be found all over the ORA, in the western and southern sections of the OSA and to a lesser extent, at the southwestern and southeastern portions of the AA; the environmental pollution (particularly generated domestic wastes) and the congestion generated by these sites, particularly the appropriation of portions or entire road rights-of-way (ROWs) and waterway easements create major land use conflicts; this is coupled with the need to provide public infrastructure, amenities, facilities, utilities and services (IAFSU), particularly recreational open spaces; another issue is the very high densities which exceed allowable densities for designated residential land use classifications; finally, the status of APDs must be well defined since most APDs in Pasay City are located in densely populated residential areas;
- d. Infrastructure, Transportation and Utilities (ITU). These land uses can be found largely in the AA where runways 13-31 and 06-24 and the LRT Line 1 depot are located and in portions of the ORA and OSA where off-street terminals of public conveyances are situated; the EDSA-MRT which actually lies within the EDSA ROW also fall under this classification; by virtue of the actual nature of their function, i.e., open space not officially devoted to recreational use, all road rights-of-way (ROWs) which include sidewalks and arcades (which are not open spaces) must also fall within this classification; one key issue in ITU areas is the non-coordination of the planning and implementation of GRP projects with the pertinent LGU offices;
- e. Institutional. Institutional land uses can be found in areas designated by the HLURB under its 1996 MZO as general institutional (GI) and special institutional (SI). The smaller GI areas are largely found in the ORA while the larger GI areas can be found in the CC-FCA portion of the NCRA. The SI areas can be found in the OVABA and in some portions of the AA; the preponderance of large national institutional sites in Pasay City, while generally a welcome development must
- f. Open Spaces/ Parks and Recreational Spaces. Open spaces can be found in very small pockets in the OSA while road ROWs in the entire city automatically fall under this classification. Open recreational spaces can be

found in the OVABA (Villamor Golf Course) and in the AA (Nayong Pilipino) while an enclosed/ roofed recreational space can be found in the ORA (Cuneta Astrodome) but all of these are not for free nor are they for general public access; the lack of legitimate public recreational open spaces for Pasay City's very high daytime/ resident population is the foremost planning issue to be resolved;

- g. Cemeteries. These can be found only in southern and eastern parts of the OSA, i.e., the public cemetery along Aurora Blvd. (Tramo) and the Catholic cemetery at the Dolores section of Arnaiz Ave. (Libertad); the congestion at the present cemeteries and the need to further enhance its capacity coupled with the need to introduce other burial concepts are the key issues to be considered;
- h. Vacant, Underutilized, Transitional or Committed for Future Development as a Planned Unit Development (PUD); these lands can be found in both the CBP-I(A) and CC-FCA portions of the NCRA; the interim uses to which these lands must be subjected is a key planning issue; whether Pasay City must introduce a system of incentives and penalties for their interim use is another key issue to be resolved;

3.3.2 Areas of Concern in the Land Use Sector

Specific areas of concern on the six (6) macro land/ water use areas are as follows:

- On the Original Settlement Area (OSA).

As much of Pasay City's available land area is devoted to transportation, mixed use structures, upscale high-density residential and commercial land uses, its available medium-cost and low-cost residential areas particularly those found in the OSA have become highly dense. Considering projected population growth, the residents' physical/ emotional/ psychological well-being and overall environmental/ social/ economic concerns/ effects, there is definite need to rationalize housing-residential and open space planning in Pasay City, particularly in the OSA in order to generate the much needed social and service spaces at the micro-scale. Considering the large residential daytime population of Pasay City, there may also be need to consider formal open space planning for the recreation and health of residents primarily in the OSA, i.e., a program that may be integrated with re-planning efforts for the land use rationalization of existing high to very high density residential areas in MMA. New/ upgraded commercial developments within the OSA need to be supported but strictly monitored because of their effects on utilities and infrastructure, traffic and the environment in general. These should be generally confined to all circumferential, radial and collector roads within the OSA.

The present grade-level tracks of the EDSA MRT that block the EDSA-Aurora Blvd. (Tramo) intersection located within the OSA have the net effect of bisecting Pasay City into a northern and a southern half. This creates major access and traffic problems inasmuch as traffic intended for the NAIA-domestic-cargo-general aviation airport complex are now required to pass through very circuitous and constricted roads, e.g., 180 degree or "U"-turning movement at Pasay Rotonda

(EDSA-Taft Avenue intersection) and left turning movements from EDSA to F.B. Harrison Avenue or EDSA to Roxas Boulevard (R-1). The EDSA MRT's continued blockage of the EDSA-Aurora Blvd. (Tramo) intersection poses a long-term physical hazard as well as a major development constraint.

Since the DOTC and the EDSA-MRT developers have both been in delay in the implementation of the promised vehicular and pedestrian access components of the EDSA-MRT project particularly as regards the EDSA-Tramo intersection, then these entities may yet be held accountable for the huge public nuisance and economic losses that they spawned.

- On the Old Reclamation Area (ORA).

Facilities catering to higher order urban functions within the ORA, e.g., five (5)-star hotels, huge mixed-use developments, dining/ entertainment establishments and gaming places, existing and proposed commercial and business centers, metropolitan hospitals and the like, are generally dated and of comparatively smaller sizes/ of less capacities than those found elsewhere in the MMA and these factors have generally reduced their competitiveness as city and metropolitan destinations.

New/ upgraded commercial developments within the ORA need to be supported but strictly monitored because of their effects on utilities and infrastructure, traffic and the environment in general. These should be generally confined to all circumferential, radial and collector roads within the ORA.

- On the Original Villamor Air Base Area (OVABA).

The OVABA, with its largely institutional (national defense and disaster response) and recreational land uses at present appears to be somewhat incompatible with the emerging land uses all around it, i.e., except for components such as the air base proper, the Malacanang Hangar and the Airmens' Village which are homogeneous with their adjoining land uses.

Its key advantage lies in the natural ground structure which is cost-efficient as far as structural foundations are concerned. This makes construction in the OVABA relatively cheaper than elsewhere in Pasay City, with the exception of the AA.

- On the Airport Area (AA).

The key problems posed by the continued operation of the NAIA-domestic-cargo-general aviation airport complex are as complex as they are multi-dimensional. These include considerations of traffic, air/ noise/ water/ land pollution, public safety and general environmental concerns. The residential and institutional/ cultural uses that have subsequently evolved in this area have ultimately become incompatible with large-scale airport operations.

NAIA 1 is already congested by present international airport operating standards. Due to lack of lateral expansion area, its runways cannot be lengthened to accommodate future generation commercial aircraft which may need longer or broader runways. Its continued operations also pose a long-term physical and

environmental hazard as well as a major development constraint, i.e., ATO land use and height restrictions.

Facilities catering to higher order urban functions within the AA, e.g., hotels, entertainment establishments, existing commercial and business centers and the like, are generally dated and of comparatively smaller sizes/ of less capacities than those found elsewhere in the MMA and these factors have generally reduced their competitiveness as metropolitan destinations.

As with OVABA, its key advantage lies in the natural ground structure which is cost-efficient as far as structural foundations are concerned. This makes construction in the AA also relatively cheaper than elsewhere in Pasay City.

- On the New Coastal Reclamation Area (NCRA)

The Boulevard 2000 Project within the NCRA is a high-density development that will create a new development focus for the entire MMA and even the northern Calabarzon area. Upon partial and substantial development, it will definitely alter travel patterns in the MMA particularly in Pasay City and Paranaque City. By year 2010, initial conservative estimates of transient daytime population within CBP-I(A) alone may reach 150,000 – 250,000 which is comparable with Pasay City's present-day residential population. By year 2030, initial conservative estimates of transient daytime population within CBP-I(A) alone may reach 700,000 –750,000 which is about thrice Pasay City's present-day residential population. The traffic and waste generation that will be generated by these transient populations, not to mention the need to satisfy their utility and support requirements will constitute a huge infrastructure and logistical burden for Pasay City.

Some of the facilities catering to higher order urban functions within the NCRA, e.g., the CCP, the old FAT, the PICC, DTI-PTTC, five (5)-star hotels, the Philippine Senate/ GSIS head office, PNB financial center complex, existing commercial and business centers and the like, while comparatively larger in area and capacity are all generally dated compared to those found elsewhere in the MMA and these factors have generally reduced their competitiveness as metropolitan destinations.

Its key disadvantage lies in the artificial ground structure which is not cost-efficient as far as structural foundations are concerned. This makes construction in the NCRA the second most expensive than elsewhere in Pasay City, with the exception of the CWA. Another key disadvantage is the lack of a good domestic water source in the area.

- On the City Waters Area (CWA)

The immense developmental and financial requirements of the NCRA should serve as clear deterrents to considerations of future reclamation at the CWA. If the necessary support infrastructure and utilities and traffic management could not be amply provided by the developers themselves, then further attempts to reclaim in the CWA should be blocked.

As with the NCRA, its key disadvantage lies in the soft and unstable submarine ground structure which is not cost-efficient as far as structural foundations are

concerned. With the required reclamation work and the mandatory settling period, this makes new construction in the CWA the most expensive than anywhere else in Pasay City.

3.3.3 General Issues to be Addressed

Uncoordinated/ Unsupervised Developments and Uncontrolled Urban Growth

As with the rest of the MMA, developments in Pasay City have largely been driven by decisions of individual landowners and these have basically been done in an uncoordinated and loosely controlled manner which led to the congested and debilitating urban sprawl that characterize most of the city. This was exacerbated by the inadequacy of guidance on the part of local, metropolitan and national governments to direct the pattern and manner of urban growth. Following are the identifiable sub-issues:

- Inefficient Land Use Pattern

Over the past 100 years, Pasay City has gradually experienced the unwanted effects of uncontrolled urban sprawl and this has presently caused artificial land scarcity, i.e., the lack of available sites for socialized housing, parks and other forms of recreational open spaces, etc. Large tracts of privately-owned but under-utilized and idle properties remain present particularly in the NCRA but these are mainly high value properties that may eventually host high-density residential or mixed-use developments or very high intensity commercial or utility uses.

The extent of the actual built-up areas in Pasay City is presently estimated at only about forty percent (40.0%) of its total land area. Within this built-up area, the approximated floor area ratio (FAR) is estimated to be between 1.0 and 1.5. This means that for every 100 square meters of land on which a structure has been actually erected, about 100 to 150 square meters (sqm) of usable space has actually been constructed. While such a medium level FAR should somehow indicate the presence of open spaces in the actual built-up portions of Pasay City, these however are largely non-existent.

The major open spaces within the built-up sections of the city are basically the road ROWs (which must however be classified as utility/ transportation areas rather than as open spaces which are wilfully misconstrued by the general public as open recreational spaces). As these ROWs are committed to uses other than recreational at present, no factual open recreational space that could effectively address the needs of the city's population does exist. The old open recreational spaces have since become enclosed recreational-entertainment venues, e.g., the Cuneta Astrodome. The actual built-up areas particularly at the ORA and OSA are extremely congested and are almost entirely lacking in quality/ functional urban open recreational spaces.

The future land use pattern must be determined by a framework planned for more efficient and highly productive urban growth, redevelopment/ renewal (re-growth). While strong demands for residential developments will always accompany both population increase and further economic growth, Pasay City has to be able to attract more economically productive activities. The CBP-I(A) at the NCRA is a

good starting point but present opportunities remain to be found in the other parts of Pasay City, particularly in the ORA.

- Land Use Conflicts

Area-specific urban land use issues applicable to Pasay City include encroachments in environmentally-sensitive areas (particularly along and beside waterways), loss of public access to the Manila Bay, loss of functional open spaces, presence of a large quantity of idle/ underutilized/ vacant/ transitional and long-term development-committed lands in addition to vehicular/pedestrian traffic congestion, inadequate off-street parking facilities, road ROW (particularly sidewalk) encroachments, etc.

Specific urban area management regulations (UAMR) should be crafted and judiciously but expeditiously implemented. These must include regulations on building siting/ project location, building height and bulk, heritage conservation, open space preservation and creation if possible, urban redevelopment/ renewal, land readjustment (where possible), designation of actual socialized housing (SH) areas, etc.

- Future Demands

The future requirements of a large resident population and an equally large daytime transient population at the present time plus the possible influx in the medium to long terms of a very high number of daytime transients pose very serious challenges to the urban management of Pasay City. Among others, these include increasing densities and the demand for residential land. While it is evident that this demand cannot be met by the LGU of Pasay City alone, it is a foregone conclusion that the spillover to the immediately adjacent MMA areas, i.e., City of Manila, Makati City, Paranaque City, Las Pinas City, etc. and even to the Greater Manila Area (GMA) provinces of Cavite, Laguna and Rizal will necessarily continue. This gives a picture of how intense future land utilization in Pasay City would be and unless this demand is properly managed, existing land will also continue to be indiscriminately utilized, i.e., leading to adverse urban development concerns such as worsening congestion, air/water/land/noise pollution, non-availability of domestic water, pedestrian/vehicular traffic congestion, encroachment on environmentally-sensitive land/ waterways/ easements as well as the loss of existing and legitimate urban open recreational spaces.

New and future developments in Pasay City should therefore be very flexible in terms of land use and building function. The actual built-up areas must not be allowed to stagnate and should be regenerated whenever resources allow it. Both of these development thrusts must always consider the conservation of existing open spaces and the creation of new ones, again when resources will permit. The maintenance of accessible and functional urban amenities, facilities, services and utilities as well as the creation of an improved urban environment should be ensured in the light of the continuing and ever-intensifying process of urbanization. All considerations of future growth must incorporate and embrace environmental conservation as a hallmark feature.

Addressing the demands of the future must also factor in the increasing requirements on public infrastructure. With the intensity of present land uses, the capacities of public infrastructure have long crossed their maximum thresholds and are now in dire need of upgrading. This is most evident in the OSA where medium to high-density residential areas are served by inadequate roads/ access-ways and insufficient or non-existent domestic water supply and other basic urban services/utilities. Future urban growth must take place only with matching infrastructure support and the government will definitely need the assistance of the private sector in realizing this.

- Possible Boundary Disputes

Parts of the territorial boundaries of Pasay City may still have to be finally resolved. If there still are unresolved disputes, then these have to be eventually settled in order to clarify the administrative control over such areas.

Policy-Driven Urban Land Use Planning

For the medium term planning horizon, i.e., 2001 - 2010, a very strong policy framework anchored on the attainment of environmental and socio-economic sustainability objectives must guide the future growth of Pasay City. This in turn must be based on the land characteristics discussed in this section. The policy framework to be adopted must also be crafted to facilitate economic activities and to further ensure that positive benefits will accrue to the community at large, particularly the bonafide residents of Pasay City.

Performance-Based Land Use Management

Emphasis must also be placed on the role of the LGU as the facilitator and regulator of all land development activities within Pasay City, particularly for those areas under GRP control. Equal emphasis must also be accorded the critical role that the private sector will play in the urban development and redevelopment processes. Pasay City must therefore provide a strong framework to guide actual future development/ redevelopment efforts while simultaneously ensuring that the wider community objectives are realized.

A wide latitude must also be given to the free land market to operate in recognition of inviolable individual property rights and in cognizance of the market-driven capital-dependent economy. This must however be dovetailed with the local government's duty to ensure that all developments remain aligned with the established community objectives.

3.3.4 Specific Issues and Concerns

On the NAIA

The NAIA (with IPT 1 at Paranaque City not actually forming part the AA) is already congested by present international airport operating standards. Both its runways cannot be lengthened to accommodate future generation commercial aircraft which may need longer and broader runways. While there are already plans to widen Runway 13-31, its continued operations together with Runway 06-24 in the long to very long terms will continue to pose physical and environmental

hazards as well as major development constraints unless the appropriate remedies are found in the present time.

If NAIA operations are fully transferred to Clark within the next 15 - 25 years, portions of the present airport complex may then be made available for high-density re-developments similar to those planned for Fort Bonifacio or for the Boulevard 2000 Project. Since NAIA is operated independently of Pasay City, the Pasay City LGU must be able to define its available options in crafting the future long-term redevelopment of the NAIA should it partly/ entirely become free for redevelopment.

The continued operations of the NAIA impose severe development restrictions on the AA, particularly in view of the ATO height restrictions that must be satisfied. Should the ATO restrictions be relaxed in the future due to changes in the operations within certain portions of the AA, the same shall have the effect of possibly catalyzing new high value private-sector led developments within the AA.

On the EDSA MRT

While the grade-level portion of the EDSA MRT at the Aurora Blvd.(Tramo) - EDSA intersection already appears to be a permanent fixture, the fact that the grade-level MRT tracks have the net effect of bisecting Pasay City into a northern and a southern half have to be addressed because of the huge public nuisance and wastefulness in resources that it has spawned. Here we have a situation wherein the interests of Pasay City may have been deliberately sacrificed in favor of the MMA and the GRP.

A grade-separated access system is the best solution for this pressing problem and since both the DOTC and the MRT developers have somehow reportedly committed in the past (c. 1989) to construct the necessary pedestrian and vehicular access-ways, i.e., particularly left-turning ramps from EDSA to Aurora Blvd. (Tramo) and vice versa, then these entities must make good on their promise. If not, they should all be made to answer for the inconveniences caused to the general public and to Pasay City residents/ visitors in particular.

While the resulting southern half of Pasay City (with NAIA and the domestic airport as the anchor) is presently perceived to have the greater land development potential, the northern half may actually be redeveloped better particularly if the mandatory ramps to and from Aurora Blvd. (Tramo) are not constructed, if international airport operations are not relocated to Clark within the next 2 decades and and if key urban renewal projects are undertaken by Pasay City in time. This also means that property values at the northern half will continue to appreciate faster mainly due to more lenient development restrictions, i.e., not hampered by airport operational restrictions.

On the Boulevard 2000 Project

The entire 1,500 hectares Boulevard 2000 Project, generally classified as a PUD, i.e., of which the CC-FCA and CBP-I(A) portions of the 330 has. NCRA are part, is a high-density cum high intensity development that will create a new development focus for the entire MMA and even for the northern Calabarzon area. Upon partial and substantial development, it will definitely alter travel

patterns in the south MMA particularly in the Pasay City and Paranaque City areas.

If the intended Boulevard 2000 developments gradually materialize over the next 10 - 50 years, Pasay City must be ready for its long-term effects (positive initially but which may turn out to be negative in the end). Since the Boulevard 2000 Project seems to be planned, implemented and which may possibly be operated relatively independent of Pasay City, the Pasay City LGU must again be able to determine its available options in determining the pace and quality of developments at the Boulevard 2000 Project areas within Pasay City.

On the rationalization of transportation and access systems within Pasay City

Pasay City has long been considered the gateway to both Calabarzon and the southern MMA as it is host to both major international and domestic transportation systems and as it may also play host to future major MMA transportation infrastructure such as the proposed elevated expressway system linking Fort Bonifacio Global City with the coastal road R-1, the proposed NCRA CBP-I(A) multi-modal beside the Redemptorist Channel, i.e., almost in front of the Redemptorist Church (in Paranaque City), the proposed MRT (or LRT) extension line from the Baclaran area to Cavite Province and the proposed LRT Line 6 within the Boulevard 2000 itself.

With the highly pedestrian character of the EDSA-Baclaran, Taft-Libertad and Taft-Gil Puyat Ave. areas, the resultant and oftentimes chaotic on-road situation, particularly at the ORA, OSA, AA and OVABA must be rationalized. A definite transportation plan must be developed for Pasay City partially conditioned on the finalization of development plans for the Boulevard 2000 Project area and for all of the areas controlled by the MIAA and the BCDA.

If the transportation system in Pasay City is not improved, commercial land uses and businesses will lose out to competition elsewhere in the MMA and eventually lead to land under-utilization, possible non-utilization and urban decay, not to mention the widespread rise of non-conforming land uses.

Need to rationalize housing and residential planning in Pasay City

As much of Pasay City's available land area is devoted to national government (GRP) use, transportation, mixed-uses, upscale high-density residential and medium to high intensity commercial land uses, its available medium-cost and low-cost residential areas (R-2 and R-3) have become highly dense and very much congested. Considering projected population growth, the residents' physical/ emotional/ psychological well-being and likewise considering the overall environmental/ social/ economic concerns/ effects, there is definite need to rationalize housing and residential planning in Pasay City. The help of the private sector (locally and internationally) in redeveloping some of these residential areas into better communities (starting at the micro scale) must be tapped whenever possible. The rationalization of housing and residential areas will only be possible with the voluntary participation of the residents/ beneficiaries/ end-users themselves through the spirit of cooperativism and through the institutionalization of sweat equity arrangements.

No formal open recreational spaces in Pasay City

Considering the very large residential daytime population and the equally large transient daytime population of Pasay City, there may be need to consider formal open recreational space planning for the recreation and health of these two types of beneficiaries. This program must be integrated with re-planning efforts to achieve the land use rationalization of existing high to very high-density residential (or R-2 and R-3) areas.

Need to reinforce Pasay City's role/ image as a high - level urban center

Considering the location of facilities catering to higher order urban functions within Pasay City, i.e., the PICC, the World Trade Center, the DTI-PTTC Complex, the Philippine Senate, the GSIS, PNB, NAIA, existing and proposed commercial and business centers, metropolitan hospitals and the like, there may be definite need to reinforce Pasay City's role as a high-level urban center with the planning for the upgrade of existing facilities and for similar new facilities and their support infrastructure.

Need to reinforce Pasay City's image as a tourism and entertainment center

Considering the location of facilities catering to tourism-related activities within Pasay City, e.g., the Cultural Center of the Philippines (CCP), the old Folk Arts Theater (FAT), the Film Center, three (3)-star to five (5)-star hotels, fine dining and entertainment establishments, upscale gaming places and the like, there may be definite need to reinforce Pasay City's role as a tourism and entertainment center with the planning for the upgrade of existing facilities and for similar new facilities and their support infrastructure.

On Non-conforming Land Uses

High-rise developments such as residential condominiums, i.e., which carries an R-5 land use classification, should not be allowed for construction in medium to high density residential areas (R-2 and R-3) and particularly not in designated APD areas because of their infrastructure demands, i.e., facilities, services and utilities, which when satisfied automatically deprives other residents of access to the same.

On the need to stop further reclamation at the City Waters Area (CWA)

Since the NCRA portions of the Boulevard 2000 Project will probably take all of 30 – 50 years to fill up because of the huge development costs involved and since these will introduce a minimum of 700,000 transients to the daytime population of Pasay City and possibly another 60,000 to 90,000 vehicles on the roads of Pasay City, all considerations for the further reclamation off the NCRA, i.e., in the CWA, should be resisted. This may eventually help in making flooding of parts of Pasay City more manageable.

On Planning for APD Areas

A general program for the redevelopment of areas currently designated as APDs, i.e., generally characterized as those with very high to very, very high residential

populations, should be put forward and integrated with parallel plans and programs for the rationalization of planning for housing and high density residential areas.

ECAs/ ECPs

Proclamation No. 2146 (issued 1981) as an amplification of Presidential decree No. 1586 has identified the Boulevard 2000 Project in general and the NCRA in Pasay City in particular as a major reclamation project which is classified as Environmentally Critical Projects (ECP). If the Nayong Pilipino is classified as a national park, it shall also fall under the separate category of Environmentally Critical Areas (ECA). Both ECPs and ECAs are therefore protected areas subject to stringent development guidelines.

3.4 Development Controls

At present, there are two (2) zoning ordinances that are being observed in Pasay City. The first is the official 1981 zoning ordinance passed by the Metropolitan Manila Commission (MMC) Office of the Governor, the MMC Ordinance No. 81-01, i.e., which is the official zoning ordinance for Pasay City recognized by HLURB (reference Figure 3.4). The second is the 1997 Pasay City Council Zoning Ordinance (1997 PCC-ZO) but which is not officially recognized by HLURB, particularly for review, comparison and updating purposes (reference 1997 Pasay City zoning map at Figure 3.5).

3.4.1 Zoning Under the 1981 MMC Zoning Ordinance

Zoning of Pasay City under the 1981 MMC Comprehensive Zoning Ordinance (1981 MMC-CZO) herein ranked according to intensity or severity of use, is as follows:

- a. Industrial Zone. Industrial zones are areas designated by the MMC under its 1981 MMC-CZO as light industrial zone (I-1) and medium industrial zone (I-2). The existing industrial area under the 1981 MMC-CZO is an I-2 zone, which can be found in the southern section of the OSA, i.e., portion of the Malibay area between Tripa de Gallina and Maricaban Creek.
- b. Commercial Zones. Commercial zones are areas designated by the MMC under its 1981 MMC-CZO as minor commercial zone (C-1), major commercial zone (C-2) and metropolitan commercial zone (C-3). Under the 1981 MMC-CZO, there are only C-2 and C-3-designated zones for Pasay City. C-2 zones are largely found in the ORA and OSA, i.e., along both sides of F.B. Harrison St., both sides of Taft Ave./ R-1, both sides of Sen. Gil Puyat Ave./ C-3, both sides of Arnaiz Ave. and both sides of EDSA/ C-4. C-3 zones are largely found in the western and eastern portions of the ORA, i.e., the east side of Roxas Blvd./ R-1, the site of the Libertad market, the areas bounded by Sen. Gil Puyat Ave./ C-3/ Leveriza St., Taft Ave./ R-1/ Arnaiz Ave. and the area bounded by Roxas Blvd./ R-1/ Arnaiz Ave. and F.B. Harrison.
- c. Residential Zones. Residential zones are areas designated by the MMC under its 1981 MMC-CZO as low-density zone (R-1), medium density zone (R-2) and the high-density zone (R-3). Under the MMC under its 1981 MMC-

CZO, only R-2 zones have been designated for Pasay City. Qualified socialized housing zone (SHZ) areas generally correspond to locations of Areas for Priority Development (APDs) as designated by the then Human Settlements Regulatory Commission (HSRC) and of Bagong Lipunan Integrated Sites and Services (BLISS) site designated by the then Ministry of Human Settlements (MHS) which can both can be found in the northernmost portion of the AA bordering the OSA.

It is interesting to note that as of 1981, there was only one (1) small area in Pasay City classified by the HSRC as an APD compared to the massive area presently classified as such (reference Figure 3.3).

- d. Utilities Zone. Under the 1981 MMC-CZO, this zone can be found only in the AA which embraces areas presently occupied or controlled by the MIAA, BCDA, PAF, ATO, LRTA and other GRP offices/ agencies.
- e. Institutional Zone. Institutional zones are areas designated by the MMC under its 1981 MMC-CZO as pre-existing institutional sites within the ORA and OSA.
- f. Parks and Recreation Zones. Under the 1981 MMC-CZO, no zoning for parks and recreation zones were supplied.
- g. Cemetery Zones. Under the 1981 MMC-CZO, these refer to two (2) pre-existing cemetery sites at the OSA.
- h. Cultural Zone. Under the 1981 MMC-CZO, this refers solely to the Nayong Pilipino at the AA. It is interesting to note that the MMC zoning map shows a much larger area occupied by the Nayong Pilipino.
- i. Planned Unit Development (PUD). Under the 1981 MMC-CZO, these lands can be found in both the CBP-I(A) and CC-FCA portions of the NCRA, i.e., the reclamation area.

Table 3.6
Estimated Zone Classification Distribution at Pasay City, 1981

Land Use Category	Land Area (Hectares)	Percent to Total (%)
Residential 2	403.87	22.37
Commercial 2	93.35	5.17
Commercial 3	46.11	2.55
Industrial 2	12.79	0.71
Institutional	3.41	0.19
Cultural	43.09	2.39
Planned Unit Development (PUD)	363.81	20.15
MHS Bagong Lipunan Integrated Sites And Services (BLISS)	11.61	0.64

Table 3.6
Estimated Zone Classification Distribution at Pasay City, 1981

Land Use Category	Land Area (Hectares)	Percent to Total (%)
HSRC Area For Priority Development (APD)	8.45	0.47
Cemetery	4.39	0.24
Utilities And Transportation	814.23	45.11
TOTAL	1805.11	100.00

Note: Computed from digitized map, subject to ground survey/confirmation.

3.4.2 Zoning Under the 1997 Pasay City Council Zoning Ordinance

Zoning under the 1997 Pasay City Council Zoning Ordinance (1997 PCC-ZO) herein ranked according to intensity or severity of use, is as follows:

- a. Industrial Zones. Industrial zones are areas designated by the HLURB under its 1996 MZO as light industrial (I-1), medium industrial (I-2) and heavy industrial (I-3). As with the 2001 land use map, the existing industrial areas under the 1997 PCC-ZO, actually I-3 zones, can be found in the southern section of the OSA.
- b. Commercial Zones. Commercial zones are areas designated by the HLURB under its 1996 MZO as principally commercial or the central business district (C-1), quasi-commercial/ industrial (C-2) and large shopping malls (C-3). Under the 1997 PCC-ZO, these are largely found in the ORA, in the central, western and southern portions of the OSA and in the northeastern/ western/ southwestern and southern parts of the AA. Except for the commercial zones in the ORA, all others follow the alignment of major roads.
- c. Residential Zones. Residential zones are areas designated by the HLURB under its 1996 MZO as low density (R-1), medium density (R-2), high density (R-3), socialized housing zone (SHZ), townhouses (R-4) and condominiums (R-5). Under the 1997 PCC-ZO, R-1 areas are designated at the southern part of the OSA, in the northwestern portion of the OVABA and at the southeastern part of the AA. R-2, R-3 and qualified SHZ areas, all of which generally correspond to locations of Areas for Priority Development (APDs) can be found all over the ORA and in almost the entire OSA, the northeastern portion of the OVABA and in the western and southwestern portions of the AA. No SHZ, R-4 and R-5 zones have been designated.
- d. Infrastructure, Transportation and Utilities Zone. Under the 1997 PCC-ZO, this zone can be found only in the AA. Existing land transportation terminals found in ORA and OSA have not yet been zoned as such.
- e. Institutional Zone. Institutional zones are areas designated by the HLURB under its 1996 MZO as general institutional (GI) and special institutional (SI). Under the 1997, PCC-ZO, the smaller institutional zones are largely found in the ORA while the larger ones can be found in the OVABA and in some portions of the AA.
- f. Open Spaces/ Parks and Recreational Zones. Under the 1997 PCC- ZO, open spaces can be found in very small pockets in the ORA (Cuneta Astrodome) and in the OVABA. Road ROWs in the entire city while generally regarded as automatically falling under this classification are not zoned as

such. Existing recreational open spaces such as those in the OVABA (Villamor Golf Course) and in the AA (Nayong Pilipino) have been zoned as a PUD and as a Cultural zone respectively.

- g. Cemetery Zones. Under the 1997 PCC-ZO, these can be found only in southern and eastern parts of the OSA, i.e., along Aurora Blvd. (Tramo) and Arnaiz Ave. (Libertad).
- h. Cultural Zone. Under the 1997 PCC-ZO, this can be found only in the northern part of the CC-FCA portion of the NCRA. The Nayong Pilipino at the AA is also classified as such.
- i. Planned Unit Development (PUD). Under the 1997 PCC-ZO, these lands can be found in both the CBP-I(A) and CC-FCA portions of the NCRA and in the OVABA.

Table 3.7
Estimated Zone Classification Distribution at Pasay City, 1997

Land Use Category	Land Area (hectares)	Percent to Total (%)
Residential 1	89.08	4.93
Residential 2 and 3	600.61	33.27
Commercial 1	10.18	0.56
Commercial 2	99.74	5.53
Commercial 3	93.77	5.19
Industrial 2	19.46	1.08
Institutional	46.81	2.59
Cultural	102.29	5.67
Planned Unit Development (PUD)	275.48	15.26
Parks & Recreation	2.19	0.12
Cemetery	2.36	0.13
Utilities and Transportation	463.16	25.66
TOTAL	1,805.11	100.00

Note: Computed from digitized map, subject to ground survey/confirmation.

3.4.3 Other Applicable Development Restrictions

Aside from the zoning ordinance, other equally important development controls are also in force in Pasay City by virtue of standing HLURB guidelines, ATO development restrictions and restrictions imposed by PD 1096 (National Building Code), its Implementing Rules and Regulations (IRR) and its various Referral Codes and related restrictions. In the case of building/ structure heights, HLURB and ATO restrictions come into play (reference composite height map in Figure 3.6). In the case of FAR, HLURB and even self-imposed developer restrictions, e.g., PEA and Boulevard 2000 at FAR 6, etc. come into play (reference composite FAR map in Figure 3.7).