

2.2.8. Buildings

(1) Structural Types

Building statistics were also prepared by SCI based on 1996 census data; however, census data only covers residential buildings. For 1996, the total number of residential buildings in Tehran is 1,484,138 units (Figure 2.2.11). This figure seems to represent each dwelling unit. Apartment houses or connected buildings should be counted as one residential building unit, from the seismic damage analysis point of view. In Chapter 4, section 4.1.2, the methodology and figures used for building units are explained in detail. In this section, based on available statistics, characteristics of the existing building distribution in Tehran are described.

Districts 2, 4, 5 and 15 have more than 100 thousand building units. The total number of buildings in District 22 is only 11,982 units, the smallest number of buildings per district within the entire city. The district with the second smallest number of buildings is District 21 and the third is District 9.

Buildings are classified into four categories according to structural type 1) Steel, 2) RC, 3) Others and 4) Unknown. Table 2.2.10 shows the distribution of these four categories aggregated into each district. Detailed structural type distribution is shown in a series of maps (Figure 2.2.12 to Figure 2.2.14). The category "Others" is further classified into nine (9) structural types. The total number of steel buildings is 604,363 units (41 %), RC is 169,960 (11 %), Others is 678,273 (46 %) and Unknown is 31,542 (2 %). Steel and RC buildings are considered to be relatively new and large sized buildings in Tehran. "Others" are older, more traditional types of buildings. The distribution pattern of these buildings shows the characteristics of Tehran's urban growth. Districts having more than 60 % of Steel structures plus RC structures are Districts 1, 2, 3, 4, 5, 6 and 22. All of these districts, except for District 22, are located in northern Tehran. District 5 consists of 83 % of steel and RC buildings and District 2 consists of 81 % of these structural types. On the contrary, Districts 10, 16 and 17, which are located in southern Tehran consist of less Steel and RC structures. District 9, 11, 12, 13, 18 and 19 also have a lower percentage of steel and RC structures.

Table 2.2.10 Building Distribution by Structure (Dwelling Unit)

District	Structural Type (No. of buildings)				Total by district	Percentage of Steel and RC Structures
	Steel	RC	Other	Unknown		
1	28,961	13,886	18,319	1,392	62,558	68
2	59,945	34,875	20,453	2,325	117,598	81
3	41,122	13,652	14,111	1,308	70,193	78
4	72,009	19,877	52,246	3,397	147,529	62
5	47,974	37,014	15,703	1,850	102,541	83
6	31,756	6,380	20,039	937	59,112	65
7	35,575	4,131	36,591	1,762	78,059	51
8	33,972	2,431	45,383	1,735	83,521	44
9	9,346	2,930	25,032	518	37,826	32
10	14,049	415	46,501	1,230	62,195	23
11	19,640	1,033	32,498	1,125	54,296	38
12	12,570	799	24,876	1,000	39,245	34
13	19,784	1,650	36,483	1,188	59,105	36
14	32,549	4,543	48,515	1,837	87,444	42
15	44,767	9,162	65,853	2,830	122,612	44
16	12,104	1,966	34,592	1,426	50,088	28
17	9,452	242	31,333	1,251	42,278	23
18	15,180	436	30,420	1,304	47,340	33
19	13,828	759	27,152	794	42,533	34
20	27,098	5,821	36,227	1,453	70,599	47
21	16,046	3,752	14,942	744	35,484	56
22	6,636	4,206	1,004	136	11,982	90
Total	604,363	169,960	678,273	31,542	1,484,138	52

Source: Statistics Center of Iran (1996)

Figure 2.2.11

Building Distribution [Dwelling Unit]

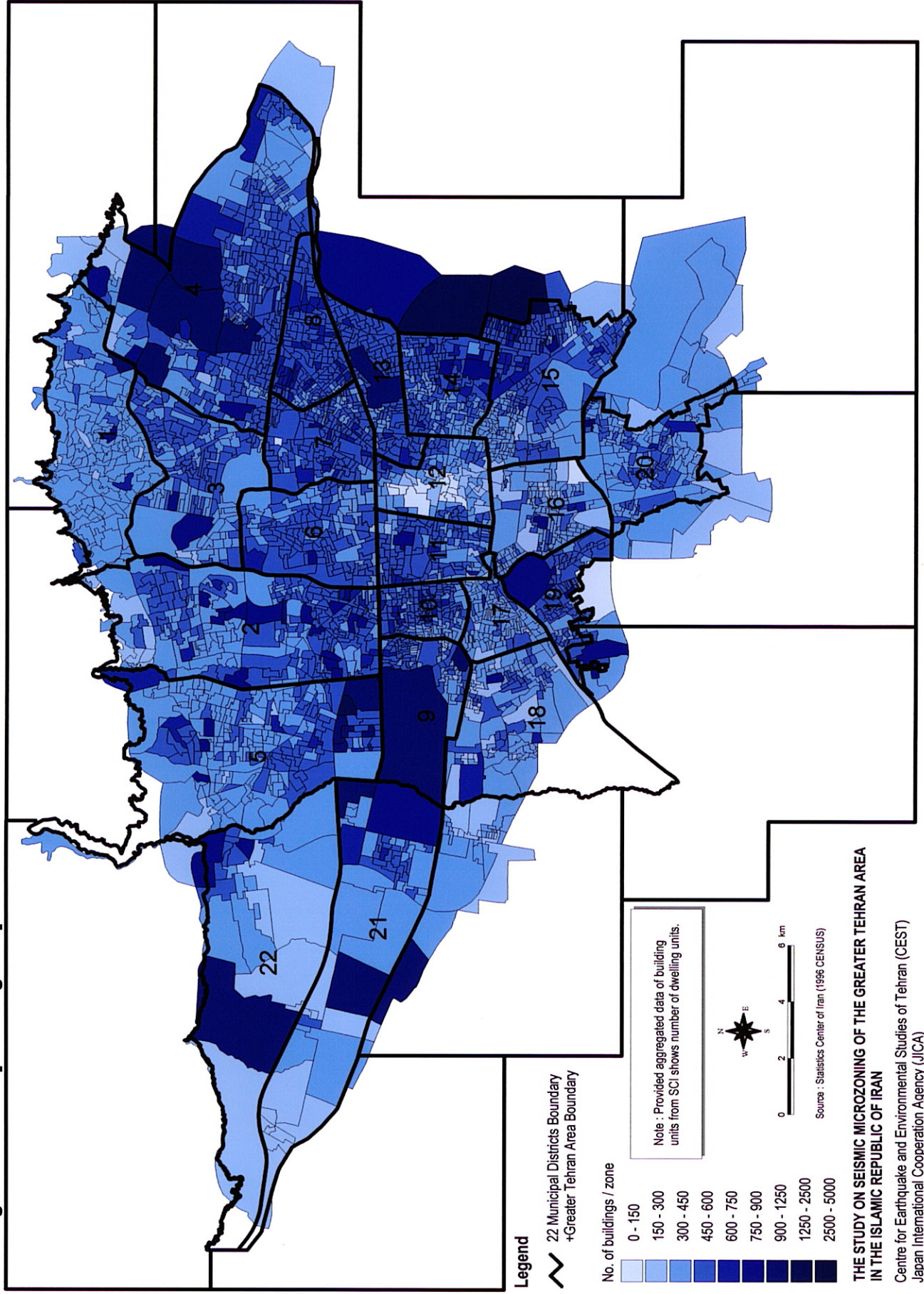


Figure 2.2.12

Building Distribution by Structure (Steel) [Dwelling Unit]

