

ANNEX 3-1

**Population, Area and Population
Density of Jabotabek Area by Kecamatan**

ANNEX 3-1 Population, Area and Population Density of Jabotabek by Kecamatan (1/3)				
Wilayah/ Kotamadya/ Kabupaten	Kecamatan	Population (1986)	Area (km ²)	Population Density (per km ²)
DKI Jakarta				
1. Selatan (South)	Kebayoran Lama	300,696	32.78	9,173
	Cilandak	128,095	18.35	6,981
	Pasar Minggu	256,299	46.90	5,465
	Mampang Prapatan	229,122	15.96	14,356
	Kebayoran Baru	199,175	12.61	15,795
	Setia Budi	221,694	8.85	25,050
	Tebet	264,652	9.53	27,770
	Sub-total	1,599,733	144.98	11,034
2. Timur (East)	Pasar Rebo	231,064	56.25	4,108
	Kramat Jati	277,700	34.98	7,939
	Jatinegara	458,750	33.77	13,585
	Matraman	176,205	4.85	36,331
	Pulo Gadung	229,115	13.62	16,822
	Cakung	119,112	42.43	2,807
	Sub-total	1,491,946	185.90	8,026
3. Pusat (Central)	Tanah Abang	229,896	9.31	24,693
	Menteng	116,581	6.53	17,853
	Senen	134,547	4.22	31,883
	Cempaka Putih	197,250	7.07	27,900
	Kemayoran	206,107	7.22	28,547
	Sawah Besar	152,040	6.22	24,444
	Gambir	129,493	7.60	17,039
Sub-total	1,165,914	48.17	24,204	
4. Barat (West)	Kebon Jeruk	225,442	42.51	5,303
	Cengkareng	225,015	55.32	4,068
	Grogol Petamburan	410,406	18.49	22,196
	Tambora	243,248	5.48	44,388
	Taman Sari	150,534	4.36	34,526
	Sub-total	1,254,645	126.16	9,945
5. Utara (North)	Penjaringan	249,354	45.40	5,492
	Tanjung Priok	250,024	25.22	9,914
	Koja	285,413	27.50	10,379
	Cilincing	161,879	43.29	3,739
	Kepulauan Seribu	13,584	12.80	1,061
	Sub-total	960,254	154.21	6,227
TOTAL		6,472,492	659.42	59,436
Kodya. Bogor				
	1. Bogor Selatan	48,338	3.150	15,345
	2. Bogor Timur	52,996	4.566	11,607
	3. Bogor Tengah	34,778	3.100	11,219
	4. Bogor Barat	38,769	3.135	12,367
	5. Bogor Utara	68,974	8.283	8,327
TOTAL		243,855	22.234	58,865

ANNEX 3-1 Population, Area and Population Density of Jabotabek
by Kecamatan (2/3)

Kecamatan	Population (1986)	Area (km ²)	Population Density (per km ²)
<u>Kab. Bogor</u>			
1. Bojong Gede	105,478	68.4	1,542
2. Caringin	59,992	68.2	879
3. Cariu	65,472	243.7	268
4. Ciampea	100,843	72.6	1,389
5. Ciawi	90,373	73.9	1,223
6. Cibinong	80,046	67.2	1,191
7. Cibung Bulang	153,283	155.8	983
8. Cigudeg	88,186	299.5	294
9. Cijeruk	108,042	101.0	1,070
10. Cileungsi	105,506	163.5	645
11. Cimanggis	113,629	53.4	2,127
12. Ciomas	237,817	97.8	2,432
13. Cisarua	105,431	145.1	726
14. Citeureup	119,965	161.5	742
15. Gunung Putri	65,343	63.5	1,029
16. Gunung Sindur	42,517	48.0	885
17. Jasinga	69,465	214.5	324
18. Jonggol	115,890	324.3	357
19. Kedung Halang	148,597	66.1	2,248
20. Leuwiliang	103,089	112.3	918
21. Nanggung	46,273	278.2	166
22. Parung	99,772	80.6	1,237
23. Parung Panjang	75,785	143.7	527
24. Rumpin	60,273	131.8	457
25. Sawangan	103,147	69.1	1,492
26. Semplak (Kotip. Depok)	134,526 250,420	73.6 63.3	1,827 3,957
27. Beji	n.a.	n.a.	n.a.
28. Pancoran Mas	n.a.	n.a.	n.a.
29. Sukma Jaya	n.a.	n.a.	n.a.
<u>TOTAL</u>	<u>2,849,160</u>	<u>3440.6</u>	<u>829</u>
<u>Kab. Tangerang</u>			
1. Tangerang	139,148	32.52	4,279
2. Batu Ceper	99,178	34.90	2,842
3. Teluk Naga	113,597	70.32	1,615
4. Serpong	101,096	79.73	1,268
5. Ciputat	168,542	63.31	2,662
6. Ciledug	98,868	25.49	3,879
7. Curug	53,722	45.75	1,174
8. Legok	83,724	93.39	896
9. Cikupa	84,407	79.98	1,055
10. Balaraja	79,592	64.73	1,230
11. Tigaraksa	62,543	77.91	803
12. Kresek	62,319	58.55	1,064
13. Kronjo	56,459	67.19	840
14. Mauk	101,999	136.00	750
15. Sepatan	132,159	142.34	928
16. Rajeg	53,669	56.45	951
17. Pasar Kemis	60,902	91.41	666
18. Pondok Aren	60,268	29.36	2,053
19. Cipondoh	90,778	39.70	2,287
20. Jati Uwung	84,211	35.66	2,361
21. Cisoka	73,514	72.26	1,017
<u>TOTAL</u>	<u>1,860,695</u>	<u>1,396.95</u>	<u>1,332</u>

ANNEX 3-1 Population, Area and Population Density of Jabotabek
by Kecamatan (3/3)

Kecamatan	Population (1986)	Area (km ²)	Population Density (per km ²)
<u>Kab. Bekasi</u>			
1. Setu	53,352	67.09	795
2. Cibarusah	50,425	85.02	593
3. Lemah Abang	106,092	111.42	952
4. Cibitung	94,309	90.24	1,045
5. Tambun	109,723	66.96	1,639
6. Pondok Gede	144,292	72.99	1,977
7. Taruma Jaya	31,462	50.69	621
8. Balejan	56,186	52.53	1,070
9. Sukatani	69,511	77.89	892
10. Cikarang	119,250	83.70	1,425
11. Pebayuran	61,507	83.91	733
12. Cabang Bungin	35,566	60.58	587
13. Serang	56,373	87.14	647
14. Bekasi Barat	85,329	21.84	3,907
15. Bekasi Utara	43,019	15.94	2,699
16. Bekasi Timur	106,084	27.95	3,795
17. Bekasi Selatan	104,481	25.34	4,123
18. Tambelan	48,156	89.27	539
19. Muara Gembong	17,426	104.01	168
20. Bantar Gebang	43,854	53.30	823
<u>TOTAL</u>	<u>1,436,397</u>	<u>1,327.81</u>	<u>1,082</u>

- Source :
- (1) Jakarta Dalam Angka 1987 (Jakarta in Figures 1987)
 - (2) Biro Pusat Statistik
 - (3) Data Pokok Untuk Pembangunan, Bappeda Bogor
 - (4) Statistical office of Kabupaten Tangerang
 - (5) Statistical office of Kabupaten Bekasi

ANNEX 3-2

**Number of Closed Markets, Groups of Shops,
Banks and Factories in Jabotabek Area by Kecamatan**

ANNEX 3-2 Number of Closed Markets, Groups of Shops, Banks
and Factories in Jabotabek by Kecamatan (1/3)

Kecamatan	No. of Closed Markets	No. of Groups of Shops	No. of Banks	No. of Factories
<u>DKI Jakarta</u>				
Kebayoran Lama	2	42	0	59
Pasar Minggu	3	20	0	29
Mampang Prapatan	1	25	0	16
Kebayoran Baru	7	16	1	1
Setia Budi	7	23	0	65
Tebet	3	2	0	10
Cilandak	3	23	0	14
(Selatan)	(26)	(151)	(1)	(194)
Pasar Rebo	3	12	0	72
Kramat Jati	4	25	0	26
Jatinegara	12	29	1	177
Matraman	1	1	0	22
Pulo Gadung	12	19	0	14
Cakung	4	8	0	77
(Timur)	(36)	(94)	(1)	(388)
Tanah Abang	6	7	1	12
Menteng	4	9	2	8
Seneng	5	4	0	4
Cempaka Putih	3	4	0	33
Kemayoran	5	16	0	22
Sawah Besar	5	16	1	32
Gambir	3	18	1	3
(Pusat)	(31)	(74)	(5)	(114)
Kebon Jeruk	4	14	0	51
Cengkareng	5	20	0	139
Grogol Petamburan	5	12	0	27
Tambora	8	25	4	67
Taman Sari	9	32	2	2
(Barat)	(31)	(103)	(6)	(286)
Penjaringan	4	10	0	97
Tanjung Priok	4	9	0	42
Koja	10	10	0	37
Keplauan Seribu	0	0	0	0
Cilingcing	3	3	0	23
(Utara)	(21)	(32)	(0)	(199)
<u>Sub-total</u>	<u>145</u>	<u>454</u>	<u>13</u>	<u>1181</u>
<u>Kab. Bogor</u>				
Jasinga	1	2	0	66
Cigudeg	1	8	0	5
Leuwiliang	1	2	0	29
Cibung Bulang	0	15	0	122
Ciampea	1	3	0	40
Semplak	2	1	0	17
Ciomas	2	0	0	39
Cijeruk	2	0	0	127
Kedung Halang	1	3	0	192
Ciawi	1	1	0	28
Cisarua	1	2	0	3
Cariu	3	0	0	101
Jonggol	1	1	0	7
Cileungsi	1	0	0	66
Citeureup	3	4	0	123
Gunung Putri	1	0	0	74

ANNEX 3-2 Number of Closed Markets, Groups of Shops, Banks
and Factories in Jabotabek by Kecamatan (2/3)

Kecamatan	No. of Closed Markets	No. of Groups of Shops	No. of Banks	No. of Factories
Cibinong	1	5	0	67
Cimanggis	2	8	0	61
Sawangan	2	7	0	7
Parung	2	4	0	7
Gunung Sindur	0	1	0	15
Rumpin	2	2	0	6
Parung Panjang	1	0	0	49
Nanggung	1	2	0	1
Bojong Gede	4	0	0	8
Caringin	2	10	0	29
Pancoran Mas	2	3	0	11
Beji	0	7	0	9
Sukmajaya	1	2	0	22
<u>Sub-total</u>	<u>42</u>	<u>93</u>	<u>0</u>	<u>1,331</u>
<u>Kodya. Bogor</u>				
Bogor Selatan	0	2	0	27
Bogor Timur	2	3	0	11
Bogor Tengah	3	14	0	7
Bogor Barat	2	3	0	5
Bogor Utara	3	2	0	32
<u>Sub-total</u>	<u>10</u>	<u>24</u>	<u>0</u>	<u>82</u>
<u>Kab. Tangerang</u>				
Tigataksa	0	0	0	6
Cikupa	2	2	0	117
Curug	1	2	0	46
Legok	0	0	0	9
Serpong	4	3	0	41
Ciputat	7	19	0	36
Pasar Kemis	1	2	0	29
Balaraja	4	4	0	139
Kresek	4	4	0	58
Kronjo	1	4	0	17
Mauk	4	4	0	93
Rajeg	1	0	0	45
Sepatan	5	2	0	90
Teluk Naga	2	7	0	50
Pondok Aren	0	0	0	6
Cisoka	1	2	0	43
Ciledug	3	5	0	15
Tangerang	4	12	0	110
Batu Ceper	3	6	0	98
Cipondoh	0	1	0	22
Jati Uwung	1	9	0	162
<u>Sub-total</u>	<u>48</u>	<u>88</u>	<u>0</u>	<u>1,232</u>

ANNEX 3-2 Number of Closed Markets, Groups of Shops, Banks
and Factories in Jabotabek by Kecamatan (3/3)

Kecamatan	No. of Closed Markets	No. of Groups of Shops	No. of Banks	No. of Factories
<u>Kab. Bekasi</u>				
Setu	2	2	0	0
Cibarusah	1	0	0	5
Lemah Abang	4	0	0	155
Cibitung	2	6	0	25
Tambun	1	3	0	112
Pondok Gede	4	13	0	3
Taruma Jaya	0	0	0	0
Babelan	2	2	0	1
Sukatani	1	0	0	97
Cikarang	3	2	0	90
Pebayuran	0	0	0	97
Cabang Bungin	1	0	0	7
Bantar Gebang	1	5	0	27
Serang	0	0	0	10
Tambelang	1	5	0	5
Muara Gembong	0	0	0	0
Bekasi Timur	2	3	0	31
Bekasi Selatan	2	7	0	20
Bekasi Barat	0	12	0	33
Bekasi Utara	1	1	0	27
<u>Sub-total</u>	<u>28</u>	<u>61</u>	<u>0</u>	<u>745</u>
<u>Jabotabek Total</u>	<u>273</u>	<u>720</u>	<u>13</u>	<u>4,571</u>

Source : " Sensus Ekonomi 1986, Potensi Desa " , Cipta Karya

ANNEX 3-3

**Number and Area of Housing and Industrial
Projects in Botabek Area by Kecamatan**

ANNEX 3-3 Number and Area of Housing and Industrial Projects
in Botabek by Kecamatan(1 (1/2)

Kabupaten/ Kotamadya	Kecamatan	Housing		Industrial	
		Number	Area (ha)	Number	Area (ha)
Kab. Bogor	Cileungsi	7	401	7	25.8
	Ciomas	9	52	-	-
	Sukma Jaya	9	78	1	1.2
	Beji	8	55	2	5.0
	Pancoran Mas	7	68	-	-
	Kedung Halang	19	614	2	11.4
	Gunung Putri	7	189	17	31.8
	Sawangan	9	239	-	-
	Citeureup	1	4	4	8.4
	Cimanggis	26	385	4	4.4
	Ciawi	2	3	-	-
	Semplak	4	16	-	-
	Bojong Gede	3	151	-	-
	Cibinong	3	80	1	0.5
	Cijeruk	3	121	1	4.5
	Parung	1	2	1	18.0
	Cisarua	2	56	-	-
	Gunung Sindur	2	36	-	-
	Cigudeg	1	70	1	15.0
	Leuwiliang	-	-	1	1.6
Parung Panjang	-	-	1	2.0	
Cilanghap	-	-	1	3.3	
Rumpin	-	-	1	24.0	
	<u>Sub-total</u>	<u>123</u>	<u>2,620</u>	<u>45</u>	<u>156.9</u>
Kodya. Bogor	-	5	25	-	-
Kab. Tangerang	Cipondoh	33	5,109	1	2.9
	Ciputat	19	679	-	-
	Cileduk	11	233	-	-
	Serpong	14	2,947	1	100.0
	Cikupa	1	42	32	114.4
	Curug	8	1,560	9	13.5
	Legok	11	10,000	2	35.5
	Jati Uwung	9	435	78	86.2
	Pondok Aren	6	971	-	-
	Tangerang	9	262	15	10.8
	Pasar Kemis	6	175	13	88.0
	Batu Ceper	2	80	21	28.2
	Teluk Naga	1	40	2	0.8
	Balaraja	-	-	1	0.2
	Others (2	4	1,225	-	-
	<u>Sub-total</u>	<u>134</u>	<u>23,758</u>	<u>175</u>	<u>480.5</u>

ANNEX 3-3 Number and Area of Housing and Industrial Projects
in Botabek by Kecamatan(1 (2/2)

Kabupaten/ Kotamadya	Kecamatan	Housing		Industrial	
		Number	Area (ha)	Number	Area (ha)
Kab. Bekasi	Bekasi Selatan	22	686	11	31.1
	Bekasi Timur	8	200	1	1.0
	Bekasi Utara	6	107	1	2.5
	Bekasi Barat	12	427	10	40.8
	Pondok Gede	37	542	2	30.0
	Babelan	3	33	6	24.0
	Tambun	8	73	4	4.3
	Cibitung	7	73	4	22.7
	Bantar Gebang	1	20	6	9.3
	Lemah Abang	1	50	1	4.0
	Cikarang	1	5	-	-
	<u>Sub-total</u>	<u>106</u>	<u>2,216</u>	<u>46</u>	<u>169.7</u>
Jabotabek	-	<u>368</u>	<u>28,619</u>	<u>266</u>	<u>807.1</u>

Note (1: Number and area of housing and industrial projects to which permissions were given by West Java government between 1983 and 1987

(2: Names of Kecamatan were not given

Source : Inventarisasi Pembangunan,
Perumahan dan Industri di Wilayah Botabek
Oktober 1987
Direktorat Tata Kota dan Tata Daerah
Direktorat Jenderal Cipta Karya
Departemen Pekerjaan Umum

ANNEX 3-4

Urban and Rural Population of Botabek Area by ARSDS

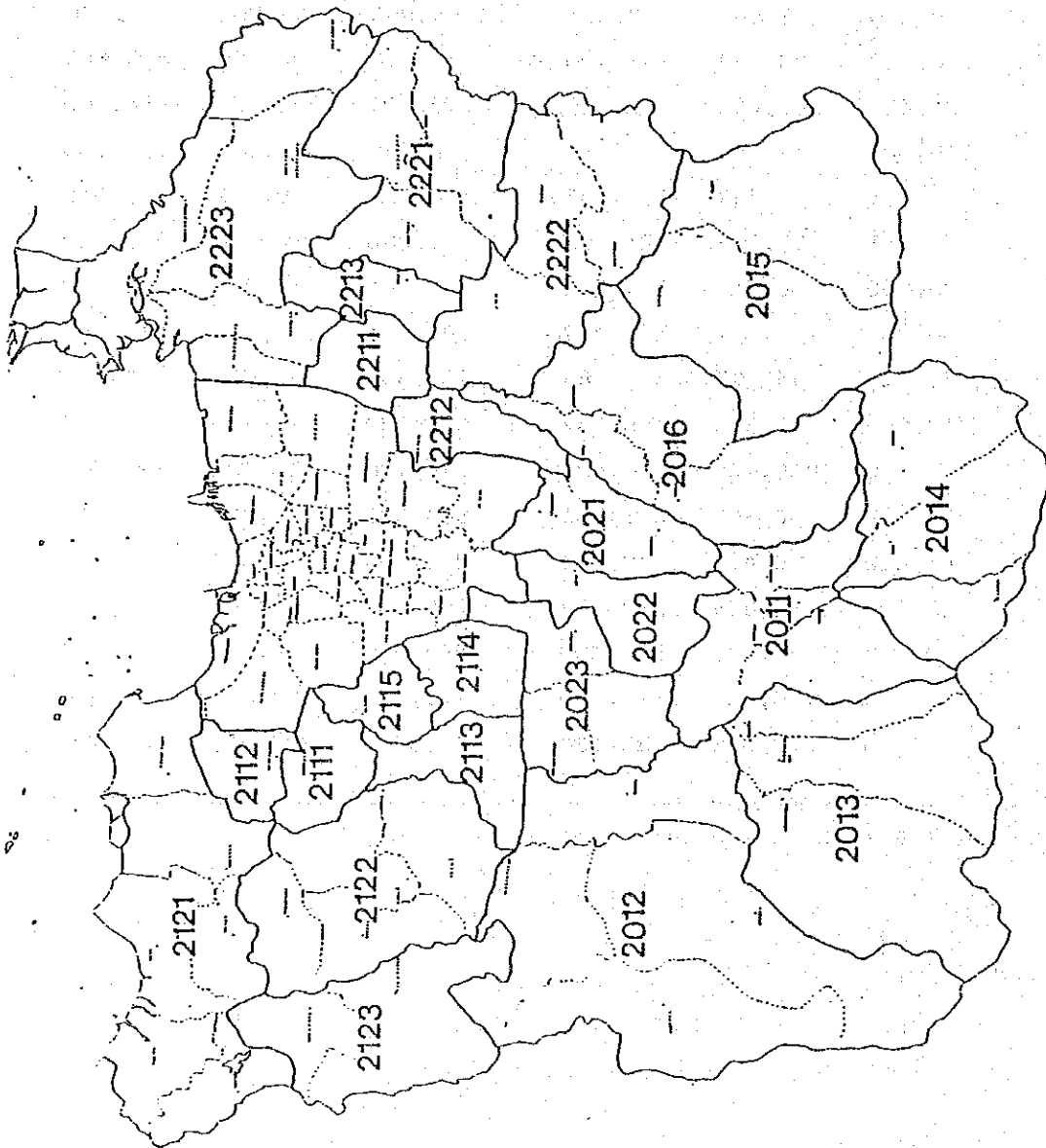
ANNEX 3-4 Urban and Rural Population of Botabek Area by ARSDS^{1/}

Number of Planning Zone	Population, 1985			Population, 2005		
	Urban	Rural	Total	Urban	Rural	Total
2011	695,701	87,805	783,506	1,115,000	96,800	1,211,800
2012	14,731	293,499	308,230	200,000	199,500	399,500
2013	107,217	303,906	411,123	220,000	337,400	557,400
2014	271,508	108,182	379,690	150,000	348,000	498,000
2015	18,002	170,470	188,472	110,000	130,200	240,200
2016	90,840	207,083	297,923	300,000	219,400	519,400
2021	239,340	103,685	343,025	375,000	199,000	574,000
2022	150,412	83,378	233,790	225,000	190,600	415,600
2023	21,402	240,408	261,810	210,000	244,100	454,100
2111	210,506	17,059	227,565	578,000	33,100	611,100
2112	92,778	13,557	106,335	198,900	19,700	218,600
2113	17,741	73,922	91,663	135,000	84,700	219,700
2114	88,766	68,588	157,354	200,100	110,700	310,800
2115	30,965	131,412	162,377	200,000	114,100	314,100
2121	38,777	474,907	513,684	136,400	545,700	682,100
2122	10,029	349,863	359,892	502,500	372,800	875,300
2123	0	210,420	210,420	274,100	224,200	498,300
2211	255,539	36,361	291,900	500,000	75,900	575,900
2212	41,510	99,473	140,983	250,000	105,600	355,600
2213	42,506	67,646	110,152	200,000	122,500	322,500
2221	50,877	285,523	336,400	597,000	260,800	857,800
2222	0	190,900	190,900	127,800	217,500	345,300
2223	0	322,080	322,080	115,200	327,700	442,900

^{1/}: Arterial Road System Development Study

Annex 3-4
Planning Zone of
Botabek by ARSDS

Source :
- Arterial Road System Development
Study in Jakarta Metropolitan
Area* by Japan International
Cooperation Agency, 1987



ANNEX 4-1

Telephone Demand by PMC Option Services

ANNEX 4-1 Telephone Demand by PMC Option Services

Ex. Area	Exchange Macroscopic Demand			Microscopic Demand			% Deviation (Micro/Macro)			Remarks			
	1997	2002	2007	1997	2002	2007	1997	2002	2007				
KT1	15,172	18,446	21,513	14,317	17,548	21,140	24,241	-4.9	-1.7	0.1	Out of objective area		
KT2	70,021	88,913	110,812	135,776	79,244	97,959	112,870	126,719	13.0	10.1	1.9	-6.7	
KT3							71						Included in KT2
PLT	34,047	43,304	50,329	56,399	31,810	39,650	45,475	48,907	-6.6	-8.4	-9.6	-14.3	
SLP	29,310	42,313	58,686	77,977	30,995	42,887	62,003	72,774	5.7	1.4	5.7	-6.7	
SM2	37,137	62,530	89,913	113,462	37,674	67,456	86,358	108,419	1.4	7.9	-4.0	-4.4	
PLM	27,745	43,601	61,525	79,557	28,433	42,603	56,163	70,367	2.4	-2.3	-8.7	-11.6	
CPP	28,226	42,035	59,869	80,989	30,348	42,976	55,787	68,955	7.5	2.2	-6.8	-14.9	
RMG	31,883	48,699	63,414	74,932	29,307	42,491	55,086	66,976	-8.1	-12.7	-13.1	-10.6	
KB	37,919	48,661	61,070	74,932	36,304	45,384	54,522	65,516	-4.3	-6.7	-10.7	-12.6	
KBB	12,285	24,722	41,608	60,687	11,614	21,928	39,290	52,791	-5.5	-11.3	-5.6	-13.0	
CPE	24,727	36,157	49,723	64,559	22,987	33,531	45,849	56,929	-7.0	-7.3	-7.8	-11.8	
KL1	27,837	45,275	67,756	93,617	29,286	46,314	66,976	89,681	5.2	2.3	-1.2	-4.2	
KL2													Included in KL1
CNE	8,695	14,892	18,218	19,441	8,390	15,999	17,807	19,123	-3.5	7.4	-2.3	-1.6	
JT	32,619	46,367	63,425	83,145	32,860	48,050	64,760	83,066	0.7	3.6	2.1	0.0	
CW	9,992	15,957	24,135	34,343	11,488	17,479	25,233	35,752	15.0	9.5	4.5	4.1	
TB	23,326	35,653	52,206	72,711	24,039	34,791	47,912	64,330	3.1	-2.4	-8.2	-11.5	

Source: Basic Design Reports by PMC Option Services

ANNEX 4-2

Data for Justification of Exchange-Based Macroscopic Demand

ANNEX 4-2 Data for Justification of Exchange-Based Macroscopic Demand

Ex. Area	Demand (1987)	PHC-0 Demand A(1987)	PHC-0 Demand B(2004)	Rate B/A	Pop. (1987)	Pop. (High&Upper Middle) (1987)	Potential (1987)	Res. Demands (2004)	Rate (B+R)/N	Reference C(1987)	Demand D(2004)	Rate D/C	Remarks
KT1	13,500	12,000	22,000	1.8	6,000	20,000	1,400	4,500	*	12,000	22,000	1.8	* Justified by PHC-0
KT2	44,500	52,000	120,000	2.3	80,000	180,000	18,000	40,900	*	52,000	120,000	2.3	* Justified by PHC-0
KT3													
PLT	20,500	22,000	52,000	2.4	33,000	80,000	7,500	18,200	*	22,000	52,000	2.4	* Justified by PHC-0
CKG	14,500	13,000	55,000	4.2	15,000	74,000	3,400	12,500	1.5	5,000	19,000	3.8	Industrialization area
ANC	7,500	8,000	55,000	6.9	28,000	130,000	6,400	29,500	1.3	8,000	38,000	4.8	
GB1	50,000	59,000	88,000	1.5	34,000	88,000	7,700	20,000	2.8	38,000	73,000	1.9	Governmental office area
GB2	21,500	23,000	80,000	3.5	67,000	180,000	15,200	40,900	2.2	49,000	105,000	2.1	
SLP	15,500	19,000	65,000	3.4	100,000	230,000	22,700	52,300	*	19,000	65,000	3.4	* Justified by PHC-0
SM1	7,500	13,000	64,000	4.9	30,000	66,000	6,800	15,000	1.9	13,000	29,000	2.2	
SM2	13,500	18,000	96,000	5.3	25,000	85,000	5,700	19,300	*	18,000	96,000	5.3	* Justified by PHC-0
PLM	18,000	15,000	68,000	4.5	62,000	215,000	14,100	48,900	*	15,000	68,000	4.5	* Justified by PHC-0
KED	N.A.	5,000	39,000	7.8	28,000	140,000	6,400	31,800	1.8	12,000	57,000	4.8	
MER	N.A.	2,000	28,000	14.0	20,000	95,000	4,500	21,600	1.1	5,000	24,000	4.8	
TGA	N.A.	3,000	10,000	3.3	4,000	17,000	900	3,900	1.0	1,000	4,000	4.0	
JIA													
CPP	19,500	18,000	66,000	3.6	70,000	200,000	15,900	45,500	*	18,000	66,000	3.6	* Justified by PHC-0
RMG	26,000	17,000	67,000	3.9	72,000	215,000	16,400	48,900	*	17,000	67,000	3.9	* Justified by PHC-0
KGD	N.A.	9,000	39,000	4.3	24,000	69,000	5,500	15,700	1.1	6,000	17,000	2.8	
PGG	N.A.	3,000	41,000	13.7	19,000	123,000	4,300	28,000	1.8	8,000	50,000	6.3	
TPR	10,000	10,000	39,000	3.9	40,000	130,000	9,100	29,500	1.7	15,000	50,000	3.3	
CIL	N.A.	2,000	25,000	12.5	22,000	76,000	5,000	17,300	1.4	7,000	24,000	3.4	
KB	31,500	28,000	65,000	2.3	80,000	252,000	18,200	57,300	*	28,000	65,000	2.3	* Justified by PHC-0
KBB	N.A.	5,000	42,000	8.4	30,000	173,000	6,800	39,300	*	5,000	42,000	8.4	* Justified by PHC-0
CPE	15,500	16,000	54,000	3.4	58,000	230,000	13,200	52,300	*	16,000	54,000	3.4	* Justified by PHC-0
KLI	14,000	16,000	76,000	4.8	60,000	260,000			*	16,000	76,000	4.8	* Justified by PHC-0
CPA	5,500												
PSM	6,500	6,000	26,000	4.3	30,000	125,000	6,800	28,400	1.0	7,000	28,000	4.0	
JAG	500	1,000	9,000	9.0	10,000	36,000	2,300	8,200	1.0	2,000	8,000	4.0	
KL2													
SER													
CME													
JT	18,000	22,000	69,000	3.1	82,000	230,000	18,600	52,300	*	22,000	69,000	3.1	* Justified by PHC-0
CV	6,500	6,000	27,000	4.5	44,000	136,000	10,900	30,900	*	6,000	27,000	4.5	* Justified by PHC-0
PSR	2,500	4,000	35,000	8.8	29,000	130,000	6,600	29,500	1.3	9,000	38,000	4.2	
KLD	N.A.	6,000	52,000	8.7	77,000	280,000	17,500	63,600	1.3	23,000	83,000	3.6	
T8	13,000	15,000	58,000	3.9	80,000	230,000	18,200	52,300	*	15,000	58,000	3.9	* Justified by PHC-0
GAN	2,500	3,000	18,000	6.0	15,000	70,000	3,400	15,900	1.4	5,000	22,000	4.4	
(Total)	398,000	451,000	1,650,000				298,500	974,200		494,000	1,616,000		

NOTE : 1) Rate (B+R)/R means the rate of the number of total telephone demand to residential demand.

ANNEX 4-3

Number of Pulses per Subscriber per Month

ANNEX 4-3 Number of Pulses per Subscriber per Month

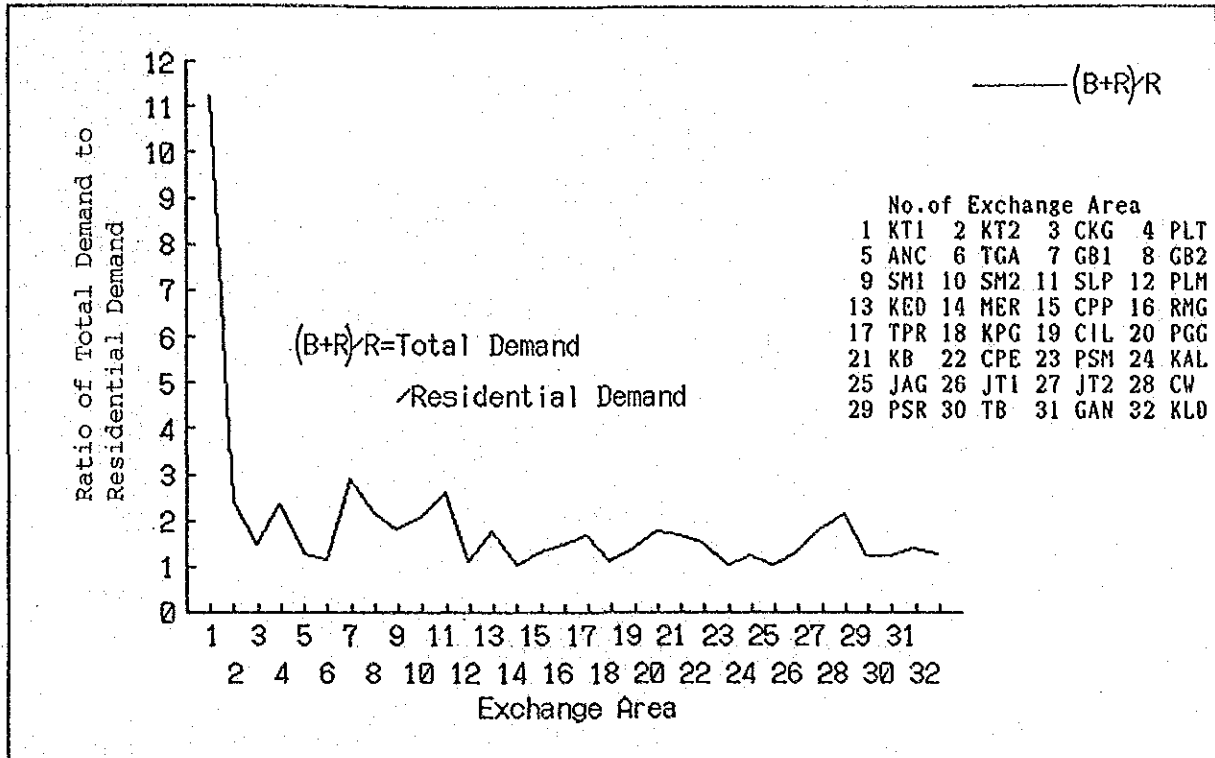
Ex. U.	1982	1983	1984	1985	1986	Residential Area Ratio			
						High	H.Mid.	L.Mid.	Low
KT1A	1,389	1,500	1,453	1,376	1,360				○
KT2A	896	992	861	906	810				○
KT2B	802	848	812	761	736				○
KT2C	387	513	698	702	645				○
KT2D	813	800	807	685	577				○
PLTA	836	877	852	843	772		○		
CKGA	542	635	651	604	636		○		
ANC	616	586	510	533	555		○		
GB1A	1,581	1,602	1,688	1,368	1,334				○
GB1B	1,473	1,469	1,479	1,262	1,223				○
GB1C	1,869	1,596	1,402	1,593	1,656				○
GB1D	2,009	2,023	1,866	1,732	1,638				○
GB1E	-	-	-	260	474				○
GB2A	1,783	1,889	1,555	1,411	1,411			○	
GB2B	1,258	1,529	1,306	1,362	1,399			○	
GB2C	-	-	-	-	259			○	
SLPA	875	824	900	862	881		○		
SLPB	-	-	-	-	357		○		
SM1A	1,431	1,426	1,400	1,204	1,135				○
SM2A	1,135	1,292	1,317	1,397	1,292				○
PLMA	904	910	953	943	834		○		
JIAC	-	-	-	-	710				
CPPA	1,016	1,072	1,018	857	852		○		
RMGA	840	889	910	879	738	○			
TPRA	1,027	1,008	1,056	957,957	928	○			
KB1A	1,051	924	982	760	821		○		
KB1B	1,364	1,335	916	912	883		○		
KB2A	395	779	979	1,051	994		○		
CPEA	456	519	551	582	606		○		
KL1A	952	959	841	822	865		○		
CPAA	321	351	386	362	401	○			
PSMA	701	754	801	653	681	○			
JT1A	1,017	873	825	781	709		○		
JT2A	621	620	652	643	603		○		
CW	1,239	1,112	1,074	864	781	○			
PSR	771	642	930	803	562	○			
TB A	881	802	805	795	728		○		
GAN A	1,141	1,128	1,234	1,146	1,130	○			

Source : EVALUASI DAN PEMAKAIAN PULSA TELEPON LOKAL DAN SLJJ
(1982 - 1986)

ANNEX 4-4

Ratio of Total Demand to Residential Demand

ANNEX 4-4 Ratio of Total Demand to Residential Demand



Note :

- (1) Ratios above were derived from the regression model obtained based on the data below.
- (2) Ratios ((B+R)/R) above could be obtained from 1 plus B/R given below.

Ex Area	Demand (1978)	Building /House	Population (1978)	Dummy	B/R
KT1	7200	2003	41054	0	10.248713
KT2	20000	3498	510249	0	1.4392397
CKG	1100	219	89048	0	0.5166112
PLT	4400	526	78899	0	1.4884194
ANC	3100	207	138994	0	0.3128370
TGA	800	46	50337	0	0.1919816
GB1	20100	1730	192420	1	1.8979324
GB2	29800	1997	341334	1	1.2289731
SM1	4400	497	121224	0	0.8612151
SM2	3600	761	140092	0	1.1410776
SLP	6000	1951	249300	0	1.6437153
PLM	2000	129	171151	0	0.1583266
KED	1000	127	33040	0	0.7883466
MER	600	13	44886	0	0.0619421
CPP	7300	874	414935	0	0.3412937
RMG	4600	471	198047	0	0.4995701
IPR	6400	1019	303042	0	0.7863423
KPG	1200	36	61396	0	0.1231703
CIL	800	148	73913	0	0.4206158
PGG	1200	298	79077	0	0.7916878
KB	12000	978	294270	0	0.6981307
CPE	2400	259	100135	0	0.5433225
PSM	700	26	80220	0	0.0880823
KAL	2600	224	187746	0	0.2586231
JGA	600	8	46708	0	0.0359784
JT1	2500	284	179104	0	0.3330864
JT2	6000	897	226471	0	0.8320007
CW	2600	1013	178478	0	1.1922535
PSR	800	99	79828	0	0.2605096
TB	3700	422	348731	0	0.2601624
GAN	700	112	56261	0	0.4181715
KLD	900	97	72010	0	0.2829585

Y Constant value -482.8975
Y Standard deviation 1761.8318
R-squared 0.9368882
Number of sample 32
Degree of freedom 28

X Parameters 3.2476767 0.8154606 15241.758
Standard Deviations 0.5689297 0.0035001 1405.5275
of parameters

ANNEX 4-5

Zonal Population in Botabek Area

ANNEX 4-5 Zonal Population in Botabek Area (1/3) (Bogor)

Zone Code	Kecamatan	Pop. 1985 (Statistics)	AKSDS Total (x1,000) 1985	AKSDS Total (x1,000) 2005	AKSDS Urban (x1,000) 1985	AKSDS Urban (x1,000) 2005	AKSDS Rural (x1,000) 1985	AKSDS Rural (x1,000) 2005	P/S Center (by BKSP)	Remarks
2011	Kodya. Bogor	244,721	784	1,212	696	1,115	88	97	P 1,000,000	Kotamadya Bogor
	Semplak	122,744								
	Kedung Halang	131,523								
	Ciomas	217,266								
2012	Jasinga	67,411	308	400	15	200	293	200	S 75,000	
	Cigudeg	86,362								
	Parung Panjang	68,703								
	Rumpin	61,086								
2013	Leuwiliang	95,866	411	557	107	220	304	337	S 150,000	
	Cibung Bulang	143,785							???	
	Ciamepa	101,304								
	Nanggun	44,976								
2014	Cijeruk	99,053	380	498	272	150	108	348		*** Urban pop. decreasing ***
	Ciawi	89,202								
	Cisarua	104,334								
	Caringin	58,631								
2015	Jonggol	109,591	188	240	18	110	170	130	S 75,000	
	Caru	61,733								
2016	Citeureup	116,254	298	519	91	300	207	219	???	(Kota Administratif Cibinong)
	Gunung Putri	58,835								
	Cileungsi	99,824								
2021	Cimanggis	111,837	343	574	239	375	104	199	S 200,000	IKK (in near future)
	Cibinong	80,184							P 200,000	Kota Administratif Cibinong
	Sukuna Jaya	122,700								
2022	Beji	40,661	234	416	150	225	84	191	P 400,000	Kota Administratif Depok
	Pancoran Mas	80,812								
	Bojong Gede	97,515								(Kota Administratif Cibinong)
2023	Parung	99,546	262	454	21	210	241	244	S 100,000	(Kota Administratif Serpong)
	Cunung Sindur	39,371								
	Savangan	101,988								

(Tangerang)

ANNEX 4-5 Zonal Population in Botabek Area (2/3)

Zone Code	Kecamatan	Pop. 1985 (Statistics)	ARSDS Total (x1.000)		ARSDS Urban (x1.000)		ARSDS Rural (x1.000)		P/S Center (by BKSP)	Remarks
			1985	2005	1985	2005	1985	2005		
2111	Tangerang	135,156	228	611	211	578	17	33	P	Kotamadya Tangerang
	Cipondoh	73,350								
2112	Batu Ceper	96,834	108	219	93	199	13	20		
2113	Serpong	83,482	92	220	18	135	74	85	P	Kota Administratif Serpong
2114	Ciputat	154,074	157	311	89	200	68	111	S	250.000
2115	Ciledug	95,276	162	314	31	200	131	114	???	Kotamadya Tangerang
	Pondok Aren	56,059							S	150.000
2121	Teluknaga	97,752	514	682	39	136	475	546		
	Kresek	56,294								
	Kronjo	55,084								
	Mauk	91,711								
	Sepatan	114,229								
	Rajeg	51,321								
2122	Curug	44,960	360	875	10	503	350	372	S	100.000
	Legok	75,502							S	100.000
	Cikupa	75,560							S	60.000
	Pasar Kemis	57,038								
	Jati Uwung	82,422								
2123	Balaraja	67,023	210	498	0	274	210	224	S	100.000
	Tigaraksa	57,061							???	
	Cisoka	67,427								IKK (in near future)

ANNEX 4-5 Zonal Population in Botabek Area (3/3) (Bekasi)

Zone Code	Kecamatan	Pop. 1985 (Statistics)	ARSDS Total (x1,000)		ARSDS Urban (x1,000)		ARSDS Rural (x1,000)		P/S Center (by BKSP)	Remarks
			1985	2005	1985	2005	1985	2005		
2211	B. Barat	69,370	292	576	256	500	36	76	P 500,000	Kotamadya Bekasi
	B. Utara	31,165								
	B. Timur	75,465								
	B. Selatan	93,731								
2212	Pondok Gede	128,888	141	356	42	250	99	106	S 150,000	
	Jati Asih								S 150,000	
2213	Tambun	96,917	110	323	43	200	67	123	S 100,000	
2221	Lemahabang	97,397	336	858	51	597	285	261	???	
	Cibitung	92,917								
	Cikarang	111,175								
	Kedung Waringsin									
2222	Setu	48,738	191	345	0	128	191	217	P 500,000	IKK (in near future)
	Cibarusa	47,549								
	Serang	52,598								
	Bantar Gebang	40,372							S 100,000	
2223	Tarumajaya	29,055	322	443	0	115	322	328		
	Babelah	49,466								
	Sukatani	65,683								
	Pebayuran	54,182								
	Cabangbungin	33,661								
	Tampelan	47,761								
	Muara Gembong	16,396								

ANNEX 4-6

Exchange Area Features (1993 - 2005)

ANNEX 4-6 Exchange Area Features (1993-2005)

a) Exchange Area Features

Exchange area features are examined, based on two kinds of information; one is referred to JTP '79 Report (for 1993 data) and the other, land use maps prepared by the municipality (for 2005 data). In this examination, each exchange area is divided into following four categories. The obtained percent distributions of each category are summarized in the attached figures.

- office/commercial areas (abbreviated as "O/C")
- industrial area (abbreviated as "I")
- residential area (abbreviated as "R")
- non-demand area (abbreviated as "N")

b) Traffic Trend Curve

From the viewpoint of telephone traffic, an increase of office/commercial and industrial areas could raise traffic intensity, whereas that of residential area, decline it. The Study therefore calculates the relative percent distribution of office/commercial areas plus industrial area to the whole area excluding non-demand area, taking into account the following weights:

	<u>1993</u>	<u>2005</u>
- office/commercial areas:	3	3
- industrial area :	2	2
- residential area :	1	2

The above weight-values are estimated, referring to the following originating traffic intensities from each telephone subscriber category. On the other hand, residential area in 2005 is double-weighted to that in 1993 as the household affordability is to be nearly doubled, from 1993 to 2005.

- office/commercial use: 0.06 E (from JTP '79 Report)
- industrial use : 0.04 E (estimated)
- residential use : 0.02 E (from JTP '79 Report)

The relative percent distributions thus obtained are estimated to change according to the trend curves illustrated in the attached figures.

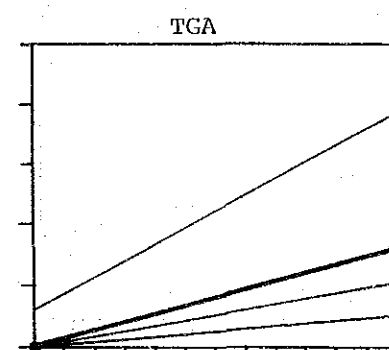
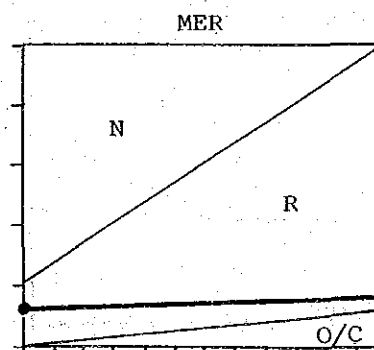
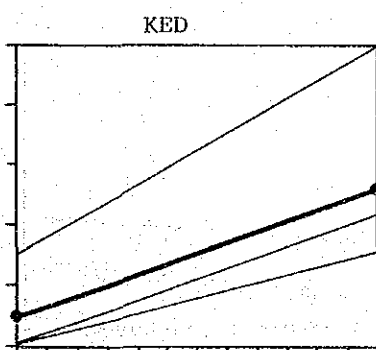
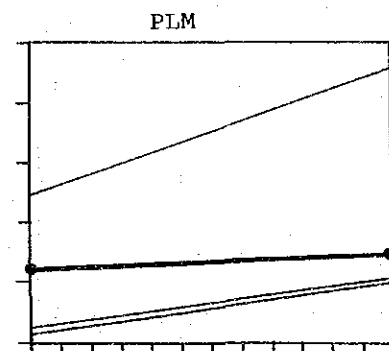
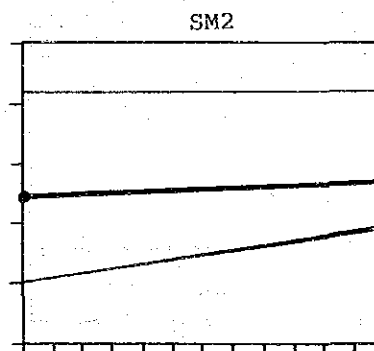
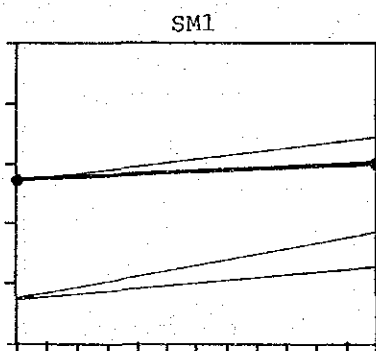
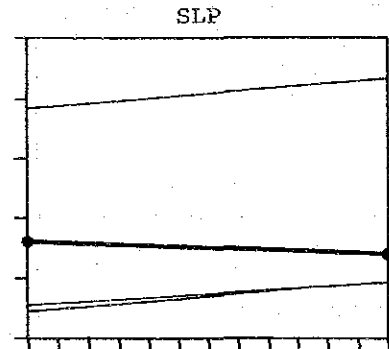
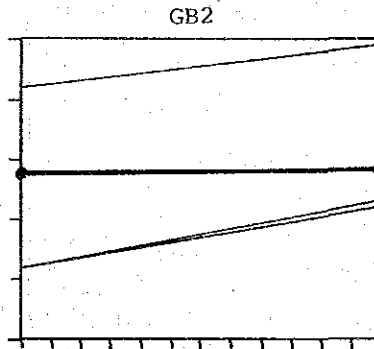
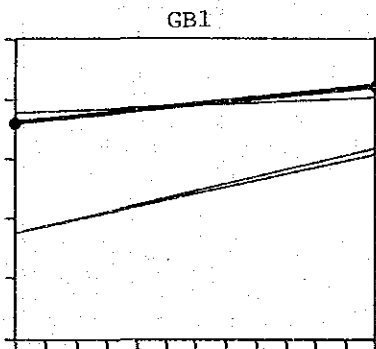
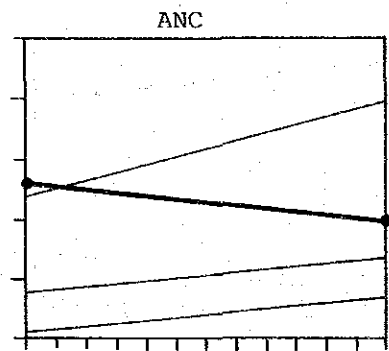
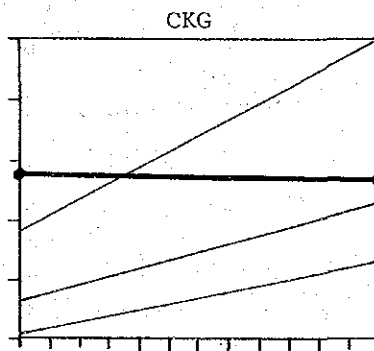
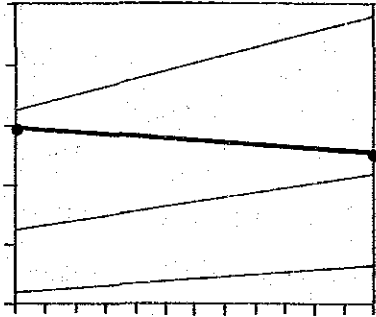
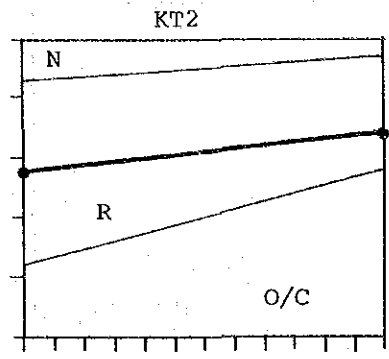
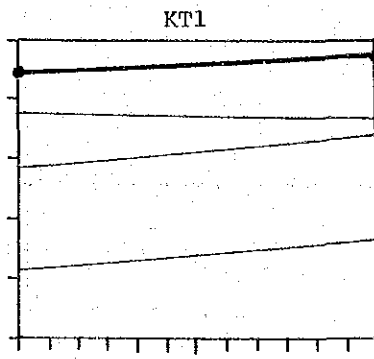
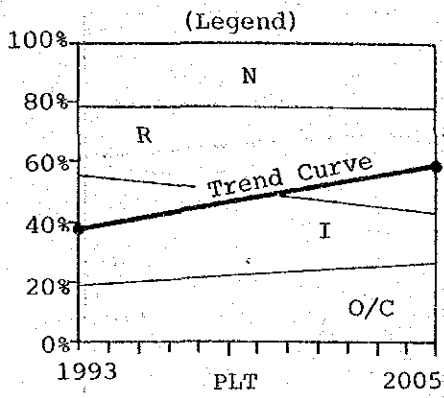
It is considered that the trend curves are to give general guidelines for increasing or decreasing trend of telephone traffic intensity in each relevant exchange area. The Study therefore intends to refer to the trend curves for estimating future trends of local traffic intensities.

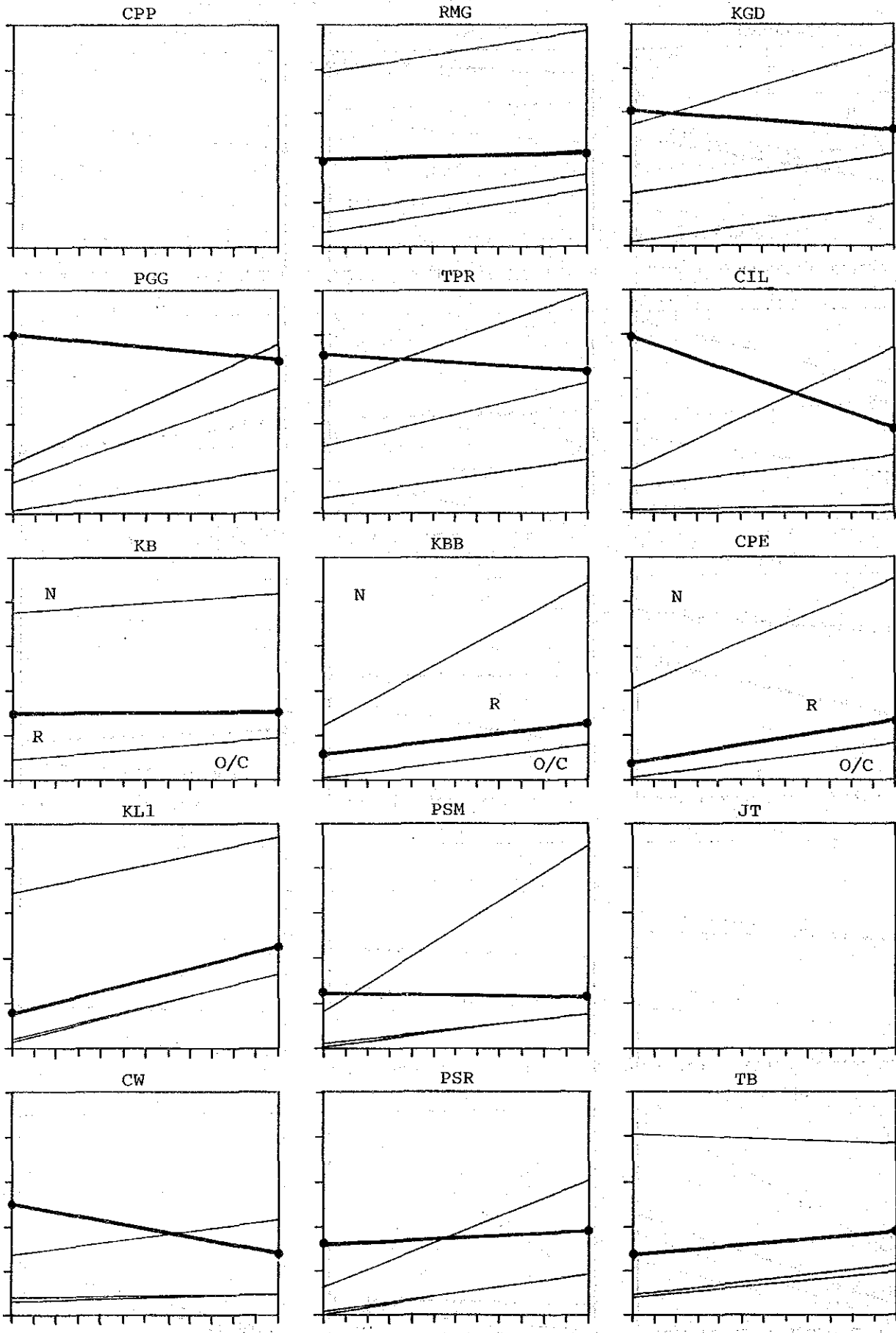
c) Application Method for Traffic Forecasting

Table 4.8 presents reference rate of the 2005 relative percentage to the 1993 relative percentage obtained above, for each exchange area.

According to these reference rates, following increment/decrement of local traffic intensity is taken into account in the Study:

<u>Reference Rate</u>	<u>1999</u>	<u>2005</u>
over 1.5	+0.0050	+0.0100
1.5 to 1.1	+0.0025	+0.0050
1.1 to -1.1	<u>+0</u>	<u>+0</u>
-1.1 to -1.5	-0.0025	-0.0050
below -1.5	-0.0050	-0.0100





ANNEX 4-7

Present Distribution of Local Traffic (Measured/Calculated)

ANNEX 4-7 Present Distribution of Local Traffic
(Measured/Calculated)

	KT Area		GB Area		SLP Area		CPP Area		KB Area		JT Area	
	Act.	Cal.	Act.	Cal.	Act.	Cal.	Act.	Cal.	Act.	Cal.	Act.	Cal.
KT1	33	32	27	29	14	15	12	11	8	7	6	7
KT2	53	51	22	21	9	9	8	9	5	5	3	5
PLT	57	57	22	23	5	4	7	7	5	4	4	5
CKG	46	45	25	25	11	10	8	7	6	6	5	6
ANC	43	40	27	28	6	5	13	14	7	7	5	6
GB1	23	23	29	28	18	18	11	11	12	12	8	8
GB2	15	15	31	33	19	19	10	10	15	14	10	10
SLP	29	30	26	28	14	11	10	10	12	13	8	9
SM1	10	11	31	32	18	19	9	8	21	18	11	11
SM2	12	13	27	29	24	21	9	9	19	18	8	10
PLM	18	20	27	24	21	20	8	8	19	20	7	8
JIA												
CPP	19	21	32	30	10	11	17	16	11	11	11	11
RMG	20	21	28	28	11	13	12	10	13	13	15	15
KGD												
TPR	27	28	27	26	10	12	21	18	9	8	6	8
KB	11	12	28	27	19	18	9	11	25	25	8	7
CPE	9	10	20	22	17	18	9	8	34	30	10	11
KL1	8	9	26	25	16	15	8	6	28	30	14	15
CPA	10	9	24	23	15	16	5	6	34	34	11	13
PSM	13	14	17	15	16	14	12	12	27	29	15	16
JAG												
JT	14	15	26	26	9	9	16	17	15	15	21	19
CW	10	9	22	22	13	14	12	13	15	15	28	28
PSR												
KLD												
TB	10	10	29	28	13	15	11	10	22	22	14	15

