

Chapter S2 SUPPORTING AND AUXILIARY DATA FOR SOCIO-ECONOMIC ASPECTS

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S2-A1 Population (#117)

Total Population by Province

No.	Provinces	Census	Projected	Projected	Projected
		1991	2000	2005	2010
1	City of B. Aires	2,965,403	3,046,662	3,061,859	3,076,436
2	Buenos Aires*1)	12,594,974	14,214,701	15,045,565	15,835,917
3	Catamarca	264,683	318,147	348,166	377,866
4	Cordoba	2,766,683	3,090,803	3,244,875	3,384,125
5	Corrientes	795,594	921,933	984,641	1,043,406
6	Chaco	839,677	951,795	1,004,226	1,050,529
7	Chubut	357,189	448,028	496,699	540,446
8	Entre Rios	1,020,257	1,113,438	1,154,618	1,189,938
9	Formosa	398,413	504,185	564,545	626,782
10	Jujuy	512,329	604,002	654,059	701,399
11	La Pampa	259,996	306,113	328,419	347,087
12	La Rioja	220,729	280,198	315,351	351,911
13	Mendoza	1,412,481	1,607,618	1,703,726	1,793,260
14	Misiones	788,915	995,326	1,112,117	1,232,201
15	Neuquen	388,833	560,726	668,431	780,660
16	Rio Negro	506,772,	618,486	679,562	741,483
17	Salta	866,153	1,067,347	1,18,025	1,300,219
18	San Juan	528,715	578,504	599,457	614,951
19	San Luis	286,458	363,345	405,733	445,919
20	Santa Cruz	159,839	206,897	233,983	260,547
21	Santa Fe	2,798,422	3,098,661	3,248,049	3,388,521
22	Santiago del Estero	671,988	725,993	749,829	768,257
23	Tierra del Fuego	69,369	115,538	147,714	188,847
24	Tucuman	1,142,105	1,293,349	1,367,092	1,432,986
25	National Total	32,615,528	37,031,802	39,301,755	41,473,702

Note: 1) Province of Buenos Aires in 1991

19 districts of Greater Buenos Aires	7,969,324
Rest of the Province	4,625,650

Population by Urban Centers in 1991

No	Urban Centers	Population	No	Urban Centers	Population
1	Greater BA	11,295,555	29	Santa Rosa-Toay	80,592
2	Greater Cordoba	1,208,713	30	Zarate	80,156
3	Greater Rosario	1,118,984	31	Pergamino	79,240
4	Greater Mendoza	773,113	32	Villa Maria-Villa Nueva	78,520
5	Greater La Plata	642,979	33	Trelew	78,194
6	Greater San Miguel: Tucuman	622,324	34	San Carlos de Bariloche	77,600
7	Mar del Plata	512,880	35	Villa Mercedes	77,077
8	Greater Santa Fe	406,388	36	Olavarria	75,714
9	Greater Salta	370,904	37	Junin	74,997
10	Greater San Juan	352,691	38	Necochea-Quequen	73,276
11	Greater Resistencia	292,350	39	San Martin-La Colonia	71,530
12	Santiago del Estero-La Banda	263,471	40	Lujan	68,029
13	Bahia Blanca	260,096	41	Campana	67,783
14	Corrientes	258,103	42	Rafaela	67,230
15	Neuquen-Plottier-Cipolletti	243,803	43	Reconquist-Avellaneda	66,656
16	Greater Parana	211,936	44	Gualeguaychu	64,843
17	Greater Posadas	210,755	45	San Francisco-Frontera	64,673
18	Greater San Salvador de Jujuy	180,102	46	Rio Gallegos	64,640
19	Formosa	148,074	47	Presidencia Roque Saenz Pena	63,135
20	Greater Rio Cuarto	138,853	48	General Roca	61,846
21	Gr. San Fernando del Valle	132,626	49	Venado Tuerto	58,784
22	Comodoro Rivadavia	124,104	50	Viedma-Carmen de Patagones	57,473
23	San Nicolas de los Arroyos	119,302	51	Goya	56,840
24	Concordia	116,485	52	Punta Alta	56,427
25	San Luis	110,136	53	Concepcion del Uruguay	55,919
26	La Rioja	103,727	54	San Ramon de la Nueva Oran	50,739
27	San Rafael	94,651	55	Ushuaia	29,166
28	Tandil	91,101	56	Rawson	19,161
				Total	22,224,446

S2-A2 Refineries (#201)

Refineries and Their Crude Processed in 1999

Refinery	Company	Province	National Crude	Import Crude
Campana	Esso	Buenos Aires	3,089,939	730,422
Campo Duran	Refinor	Salta	1,077,676	16,201
Dock Sud	Dapsa	Buenos Aires	131,198	0
Dock Sud	Shell	Buenos Aires	4,726,859	450,049
Galvan	Esso	Buenos Aires	778,343	0
La Plata	Repsol-YPF	Buenos Aires	9,953,014	0
Lujan de Cuyo	Repsol-YPF	Mendoza	6,324,570	0
Plaza Huincul	Repsol-YPF	Neuquen	1,372,543	0
Ricardo Elicabe	EG3	Buenos Aires	1,644,378	0
San Lorenzo	Refinaria San Lorenzo	Santa Fe	1,688,354	54,576
Total			30,786,874	1,251,248

Note: YPF Lujan de Cuyo is the only one in the model area.

Productions at Refineries in or near Model Areas in 1999

	Unit	Lujan de Cuyo (YPF)	La Plata (YPF)	Dock Sud (Shell)
National Crude	m ³	6,324,570	9,953,014	4,726,859
Import Crude	m ³	0	0	450,049
Other Feed	ton	219,694	1,423,777	139,102
Total Feed				
Refinery Gas	1000m ³	238,396	250,007	6,455
Liquefied Gas	ton	215,720	476,041	122,578
Jet Fuel	m ³	0	109	0
Gasoline, common	m ³	548,855	949,206	325,231
super	m ³	1,035,807	1,729,496	1,089,135
straight	m ³	476,780	1,587,360	24,203
Solvents	m ³	0	0	18,131
Terpene	m ³	0	0	16,514
Kerosene	m ³	0	0	50,919
JP (Jet Fuel?)	m ³	245,816	845,072	456,068
Gas Oil	m ³	3,081,354	3,516,126	1,888,892
Diesel Oil	m ³	0	5,349	6,274
Fuel Oil	ton	0	259,078	599,945
Lubricants	m ³	0	84,627	88,242
Greases	ton	0	326	0
Asphalt	ton	0	273,591	243,615
Residual Carbon	ton	531,621	487,499	149,526
Other Product	ton	442,127	1,333,161	114,565

Productions in 2000 (until November for 11 months)

	Unit	Lujan de Cuyo	La Plata	Dock Sud
National Crude	m ³	5,345,429	8,651,186	3,918,719
Import Crude	m ³	0	128,171	555,875
Other Feed	ton	219,596	1,292,928	162,503
Total Feed				
Refinery Gas	1000m ³	173,538	239,819	0
Liquefied Gas	ton	188,442	458,769	114,224
Aero-gasoline	m ³	0	17	0
Gasoline, common	m ³	334,530	660,627	292,272
super	m ³	802,388	1,521,190	954,078
straight	m ³	374,847	1,299,749	12,584
Solvents	m ³	0	0	13,783
Terpene	m ³	0	0	20,001
Kerosene	m ³	0	0	35,947
JP (Jet Fuel?)	m ³	223,513	802,857	301,068
Gas Oil	m ³	2,746,383	3,242,382	1,731,122
Diesel Oil	m ³	0	0	2,221
Fuel Oil	ton	0	316,371	523,266
Lubricants	m ³	0	148,571	78,963
Greases	ton	0	174	0
Asphalt	ton	0	205,125	125,360
Residual Carbon	ton	475,615	470,797	126,870
Other Product	ton	470,486	1,030,226	190,592

Capacity of Process Units at Refineries in or near Model Area (#253)

Process Units	Shell Dock Sud	YPF Lujan de Cuyo
Topping	18,000	20,000
Vacuum	6,500	10,500
Vis-breaker	2,000	0
Thermal Cracking	0	0
Catalytic Refining	2,500	1,700
Coque Fondo Vacuum	1,000	6,100
Coque Carbon Residue	0	0
Hydro Cracking	0	6,000
Catalytic Cracking	4,100	6,800
Hydro Treater DO	7,300	2,000

Unit m³/stream day

S2-A3 Oil Products Sold in Model Areas (#179 & 204)

Regular Naphtha Unit m3

Year	City of BA	Prov. of BA	Prov. of Mendoza
97	163611	819431	101784
98	124245	710162	90118
99	103303	652137	82510
2000	49667	459875	56130

Super Naphtha Unit m3

Year	City of BA	Prov. of BA	Prov. of Mendoza
97	634480	1508074	120470
98	605053	1445995	114253
99	554891	1442013	108277
2000	498766	1391537	100531

Gas Oil Unit m3

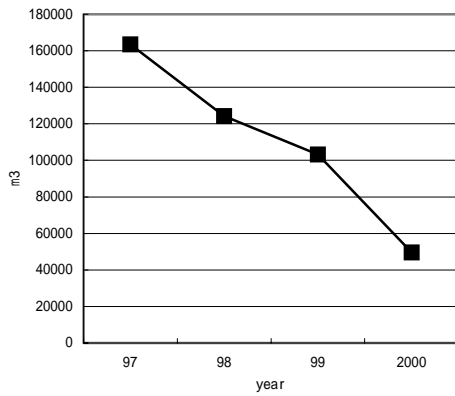
Year	City of BA	Prov. of BA	Prov. of Mendoza
97	767531	4378034	388095
98	892880	4505235	393381
99	822862	4764227	404023
2000	733576	4419682	432907

Fuel Oil Unit ton

Year	City of BA	Prov. of BA	Prov. of Mendoza
97	406021	261876	19662
98	762400	357818	17789
99	404177	265828	43353
2000	205636	215199	11513

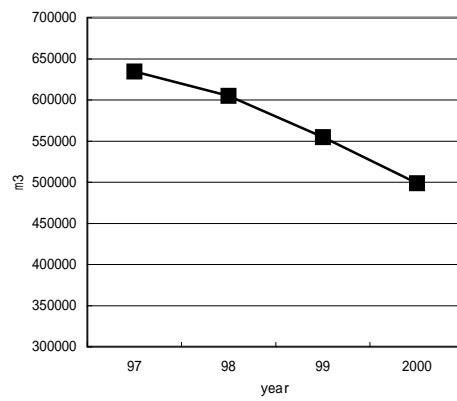
Regular Naphtha

City of BA

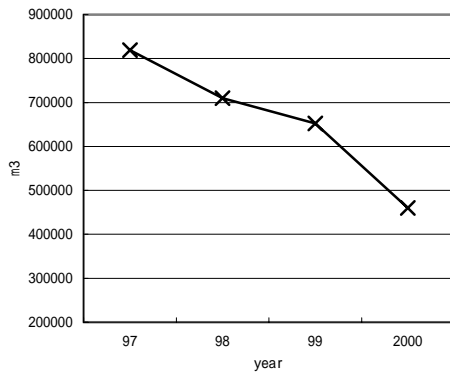


Super Naphtha

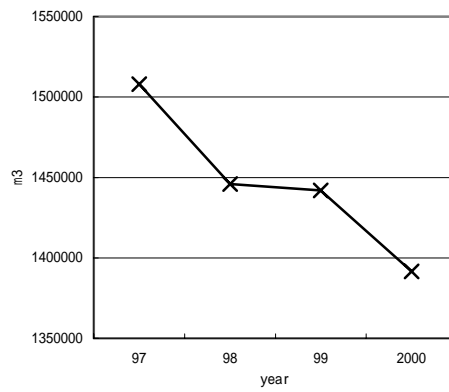
City of BA



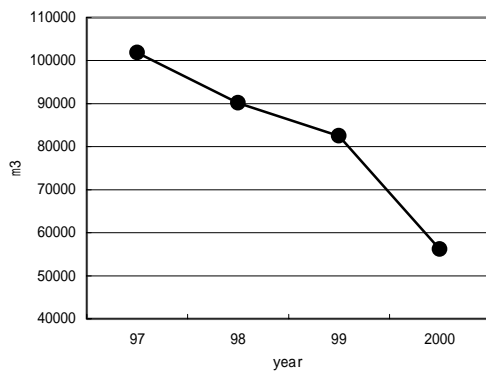
Prov. of BA



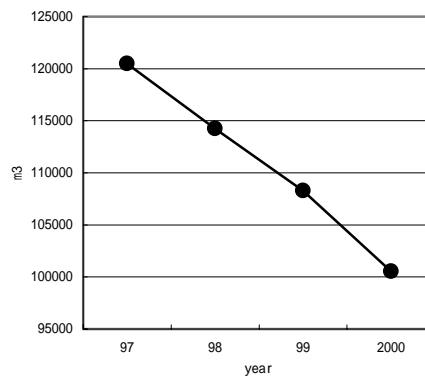
Prov. of BA



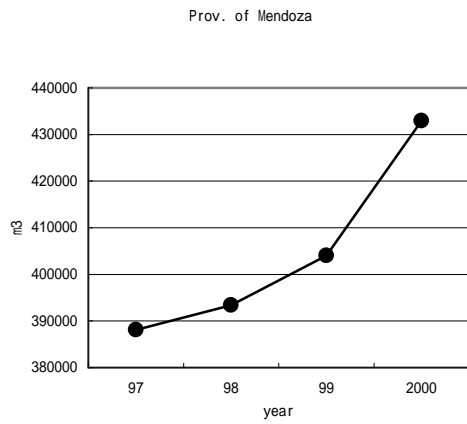
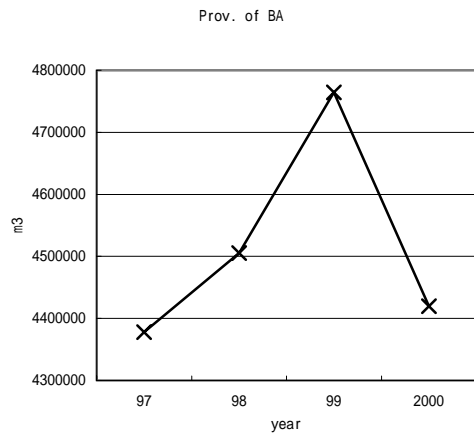
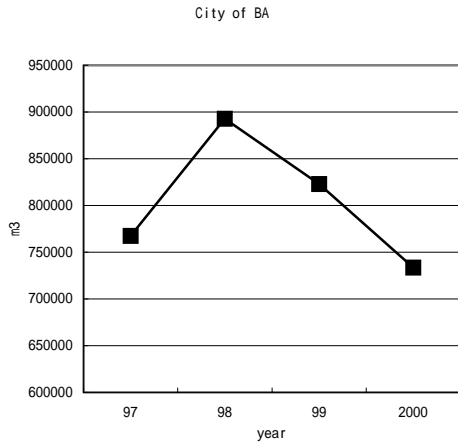
Prov. of Mendoza



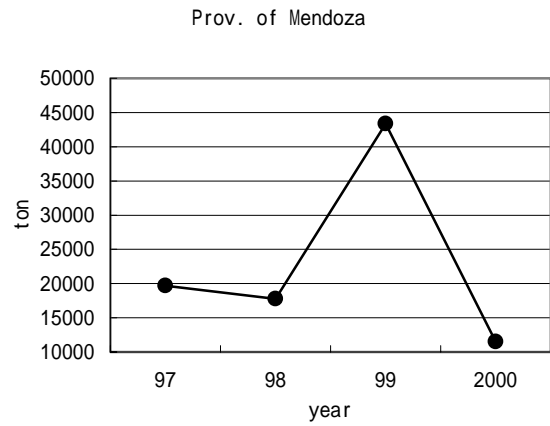
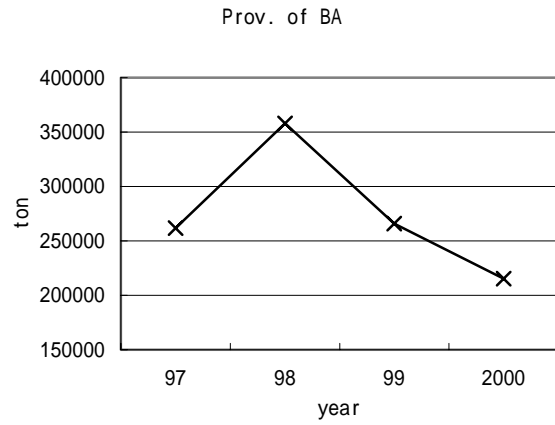
Prov. of Mendoza



Gas Oil



Fuel Oil



S2-A4 Natural Gas

Cited from Informe Trimestral ENARGAS 12/2000 (#199)

Kinds of tables in the publication

Table	m ³ /(10/99-9/00)	User number	User*1)	Location
1-4	yes	yes	size	by Distributors
1-5	yes	yes	size	by Provincial
1-6	yes	yes	all kinds	by Distributors
1-7	yes	yes	all kinds	by Provincial
1-8	yes	yes	size	by Sub-zone
1-9	yes	yes	all kinds	by Sub-zone
1-10	yes	no	industry	by Provincial
1-11	yes	no	industry	by Sub-zone

Note *1)

all kinds: Residencial, commercial, industrial, plants, Offices, GNC, (Subdistributors)

industry: Aceitria, Alimenticia, Automotriz, Bebidas, Gaucho y Plastico, Celulosica papelera, Cementera, Ceramica, Cristaleria, Cuero, Destileria, Frigorifica, Maderera, Metalurgia ferrosa, Metalurgia no ferrosa, Petroquimica, Quimica, Siderurgia, Textil, Otras industrias

Consumption in Model Areas (Table 1-5 p39) 1000m³ of 9300 kcal gas

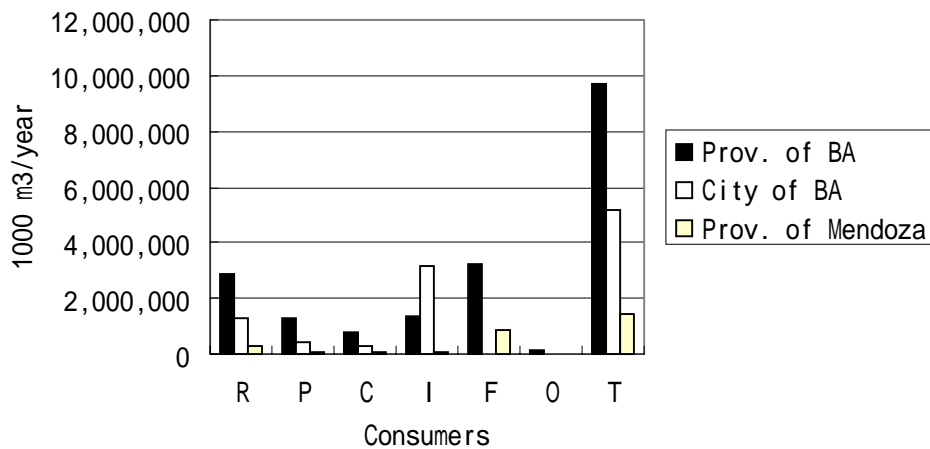
		Province of BA	City of BA	Prov. of Mendoza
Residential Service	R	2,839,510	1,305,692	300,939
General P Service*	P	1,297,718	395,810	73,051
General G Service*	G	16,448	314	12,397
SDB*	S	64,507	--	15,810
GNC*	C	776,916	285,473	101,713
Grand Users, ID*	ID	467,996	1,603,631	28,383
Grand Users, IT*	IT	32,596	0	0
ID/IT CdT*	IC	926,721	1,556,370	49,548
Grand Users, FD*	FD	1,071,139	10,908	55,640
Grand Users, FT*	FT	6,493	0	0
FD/FT CdT	FC	2,196,786	5,298	797,827
Total		9,696,830	5,163,496	1,435,307
Population in 2000		14,214,701	3,046,662	1,607,618
Consumption/capita	m ³	682.2	1694.8	892.8
Total Households 1991	*1)	3,409,089	993,223	338,405
Ave. people in a house	'91	3.69	2.99	4.17
Total Households 2000	*2)	2,575,810	1,216,009	240,583
Ave. people in a house	'00	5.52	2.51	6.68

*1): #117, p89, *2): #199

*Note: P Service – Services to customers having no contract of minimum consumption, except residential customers

- G Service - Services to customers having contract of minimum consumption, except residential, consuming more than 1000 m³/day for more than one year
- SDB - Sub-distributor: Customer operating a pipe directly connected to the pipe of the main distributor
- GNC - Compressed Natural Gas
- ID - Customers consuming more than 3,000,000 m³ of gas annually
- IT - Distributor's customers buying more than 3,000,000 m³ annually directly from the Gas Transport System
- FD - Customers consuming more than 10,000 m³ of gas daily for one year
- FT - Distributor's customers consuming more than 10,000 m³ of gas daily for one year directly from the Gas Transport System
- CdT Customers purchase gas from a distributor separately from transporters and/or distributors

Natural Gas Consumption from 10/99 to 9/2000



Notes for X- axis:

I: Sum of IT, ID, IC;

F: Sum of FT, FD, FC

O: Others – Sum of G, S of the Table

T: Total

Annual gas consumption /customer: m³/annual/one customer

Table 1.7 cf. #199.xls

	Comercial	Usinas	Industrial	Ente Oficiales
Prov. of BA	5,154.9	149,292,095.2	248,180.2	10,247.0
City of BA	4,542.1	902,857,428.6	35,386.8	17,050.3
Prov. of Mendoza	3,294.6	102,318,500.0	576,000.0	12,000.0

Natural Gas Tariff \$/m³ to Final Users by Distributors 10/2000

	Metrogas	Litoral	Cuyana
Residential	0.14885	0.123045	0.142207
SG-P	0.121276 – 0.139101	0.105253 – 0.121437	0.112074 – 0.127936
SG-G	0.081312 – 0.087138	0.075885 – 0.080715	0.083348 – 0.088221
ID, FD	0.082377 – 0.082955	0.074541 – 0.074971	0.076518 – 0.076732
IT, FT	0.075249 – 0.075828	0.067450 – 0.067879	0.071401 – 0.071615
SDB	0.094075	0.087101	0.084197
GNC	0.096752	0.090091	0.087153

Table 1-7.3a Industries (except commercial, power plants, official)

Province	Sold in m ³	Number of Industrial Users
Buenos Aires	3,915,828,000	15,800
City of Buenos Aires	123,388,000	3,500
Mendoza	357,247,000	620

2.2.1

Gas Sold in Provinces of Model Areas

Note: Refer to previous page for abbreviations of users

Provincial Buenos Aires, Gas Sold in 1000 m3

	Residence	GP	GG	SDB	GNC	Subt. I	F	Total
1	73282	67886	872	2046	60282	158339	266099	628806
2	68494	72694	591	2037	56966	156550	271843	629175
3	105236	86226	919	2566	64050	150546	270805	680348
4	136616	96602	976	3274	63448	119760	285320	705996
5	323771	129429	1715	7421	67239	116074	294044	939693
6	399068	151261	2001	8742	65620	79682	265414	971788
7	567006	162419	1922	12581	70172	55684	260810	1130594
8	432538	151169	1687	10045	71257	77491	291230	1035417
9	319928	119550	1529	7179	69616	116927	242874	877603
10	192100	104475	1343	4144	63005	132958	283373	781398
11	123528	80646	1538	2293	61666	111025	272259	652955
12	97943	75361	1355	2179	63595	152277	270347	663057
	2839510	1297718	16448	64507	776916	1427313	3274418	9696830

Provincial Buenos Aires, No. of Customers

	Residence	GP	GG	SDB	GNC	I	F
1	2557787	108,795	8	14	357	36	150
2	2563446	108,712	8	14	360	38	150
3	2568655	108,703	8	14	368	38	149
4	2575765	108,849	8	14	370	38	147
5	2584098	109,371	9	14	372	40	143
6	2592015	109,854	9	14	377	40	146
7	2599745	110,135	9	14	379	38	147
8	2609334	110,572	9	14	384	39	148
9	2614726	110,667	9	14	391	39	148
10	2541919	108,830	8	13	335	39	148
11	2548744	108,731	8	13	345	38	149
12	2553481	108,802	8	14	353	38	149
Min. No.	2541919	108,703	8	13	335	36	143
Max. No.	2614726	110,667	9	14	391	40	150
Average	2575809.6	109,335	8	14	366	38	148

City of Buenos Aires, Gas Sold in 1000 m3

	Residence	GP	GG	SDB	GNC	I	F	Total
1	38916	21362	0	0	20803	354519	1325	436925
2	37179	20073	0	0	20143	326313	1251	404959
3	52127	24323	0	0	24204	325182	1353	427189
4	67749	24948	0	0	23104	289737	1283	406821
5	149962	38849	0	0	24654	240663	1401	455529
6	184122	42242	74	0	23864	200295	1288	451885
7	247150	54060	62	0	25129	128184	1345	455930
8	188654	46201	91	0	25304	208379	1280	469909
9	144827	39766	87	0	24573	228399	1308	438960
10	92810	33456	0	0	24564	222909	1525	375264
11	58352	27248	0	0	24231	303949	1522	415302
12	43844	23282	0	0	24900	331472	1325	424823
	1305692	395810	314	0	285473	3160001	16206	5163496

City of Buenos Aires, No. of Customers

	Residence	GP	GG	SDB	GNC	I	F
1	1214830	59749	1	0	150	4	10
2	1214565	59595	1	0	150	3	10
3	1214515	59308	1	0	150	3	10
4	1215095	59178	1	0	150	4	10
5	1216073	59092	1	0	150	3	7
6	1216933	59174	1	0	150	3	6
7	1218062	59098	1	0	149	3	6
8	1218849	59157	1	0	150	3	6
9	1219609	58986	1	0	150	3	5
10	1214068	60002	1	0	149	5	9
11	1214688	59847	1	0	149	4	9
12	1214818	59658	1	0	149	4	9
Min. No.	1214068	58986	1	0	149	3	5
Max. No.	1219609	60002	1	0	150	5	10
Average	1216008.8	59403.7	1.0	0.0	149.7	3.5	8.1

Province of Mendoza, Gas Sold in 1000 m3

	Residence	GP	GG	SDB	GNC	I	F	Total
1	9512	3931	2028	1600	7528	4702	66564	95865
2	9596	4552	2180	2261	7560	11275	68387	105811
3	12133	5065	2420	1441	8637	7367	75480	112543
4	14973	4714	1301	976	8475	1676	68418	100533
5	34739	7643	533	1255	8797	6135	75239	134341
6	45097	8502	555	1422	8742	5007	72734	142059
7	56621	10040	509	1690	9099	2674	73563	154196
8	42782	8366	488	1408	9412	7635	74153	144244
9	31170	7078	484	1098	9147	7465	71185	127627
10	19275	5082	488	879	8071	7777	72467	114039
11	13624	4140	472	725	7883	9086	66635	102565
12	11417	3938	939	1055	8362	7131	68642	101484
	300939	73051	12397	15810	101713	77930	853467	1435307

Provincial Mendoza, No. of Customers

	Residence	GP	GG	SDB	GNC	I	F
1	239388	11657	13	1	48	12	17
2	239643	11676	14	1	49	12	17
3	240139	11680	14	1	49	11	18
4	240611	11688	13	1	48	10	16
5	241137	11733	12	1	48	9	16
6	241766	11773	13	1	48	11	16
7	242477	11805	13	1	50	9	16
8	242905	11820	13	1	50	10	16
9	243094	11795	13	1	50	9	16
10	238354	11329	11	1	47	12	17
11	239097	11364	11	1	47	12	17
12	238388	11642	12	1	47	12	17
Min. No.	238354	11329	11	1	47	9	16
Max. No.	243094	11820	14	1	50	12	18
Average	240583.3	11663.5	12.7	1.0	48.4	10.8	16.6