

Anexos 4-3 Resultados de Estudio de Velocidad de Vehiculos

Vehicle Speed Survey

Route No. 1

Start Time: 7:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Km 154 Ctra guasaule En La Interseccion Com.Hnos garcia	20.000	1.258	57.2	
2	Solida Cinandega-Guasaule				
3					
4					
5					
6					
7					
TOTAL		20.000	1.258	57.2	

Vehicle Speed Survey

Route No. 1

Start Time: 10:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Km 154 Ctra guasaule En La Interseccion Com.Hnos garcia	20.000	1.251	57.6	
2	Solida Cinandega-Guasaule				
3					
4					
5					
6					
7					
TOTAL		20.000	1.251	57.6	

Vehicle Speed Survey

Route No. 1

Start Time: 17:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Km 154 Ctra guasaule En La Interseccion Com.Hnos garcia	20.000	1.305	55.2	
2	Solida Cinandega-Guasaule				
3					
4					
5					
6					
7					
TOTAL		20.000	1.305	55.2	

Vehicle Speed Survey

Route No. 1 Start Time: 7:25
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Solida Cinandega-Guasaule	20.000	1.247	57.7	
2	Km 154 Ctra guasaule En La Interseccion Com.Hnos garcia				
3					
4					
5					
6					
7					
TOTAL		20.000	1.247	57.7	

Vehicle Speed Survey

Route No. 1 Start Time: 10:22
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Solida Cinandega-Guasaule	20.000	1.238	58.2	
2	Km 154 Ctra guasaule En La Interseccion Com.Hnos garcia				
3					
4					
5					
6					
7					
TOTAL		20.000	1.238	58.2	

Vehicle Speed Survey

Route No. 1 Start Time: 17:23
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Solida Cinandega-Guasaule	20.000	1.476	48.8	
2	Km 154 Ctra guasaule En La Interseccion Com.Hnos garcia				
3					
4					
5					
6					
7					
TOTAL		20.000	1.476	48.8	

Vehicle Speed Survey

Route No. 2 Start Time: 7:15
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada a Argelia Km 115.5	4,700	282	60.0	
2	Entrada Chichigalpa				
3	Entrada A Chinandega	11,300	798	51.0	
4					
5					
6					
7					
TOTAL		16,000	1,080	53.3	

Vehicle Speed Survey

Route No. 2 Start Time: 10:28
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada a Argelia Km 115.5	4,700	254	66.6	
2	Entrada Chichigalpa				
3	Entrada A Chinandega	11,300	864	47.1	
4					
5					
6					
7					
TOTAL		16,000	1,118	51.5	

Vehicle Speed Survey

Route No. 2 Start Time: 17:16
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada a Argelia Km 115.5	4,700	219	77.3	
2	Entrada Chichigalpa				
3	Entrada A Chinandega	11,300	823	49.4	
4					
5					
6					
7					
TOTAL		16,000	1,042	55.3	

Vehicle Speed Survey

Route No. 3

Start Time: 7:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada a Argelia Km 115.5	13,700	728	67.7	
2	Enparme Telica-Sn Jsidro				
3					
4					
5					
6					
7					
TOTAL		13,700	728	67.7	

Vehicle Speed Survey

Route No. 3

Start Time: 10:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada a Argelia Km 115.5	13,700	832	59.3	
2	Enparme Telica-Sn Jsidro				
3					
4					
5					
6					
7					
TOTAL		13,700	832	59.3	

Vehicle Speed Survey

Route No. 3

Start Time: 17:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada a Argelia Km 115.5	13,700	703	70.2	
2	Enparme Telica-Sn Jsidro				
3					
4					
5					
6					
7					
TOTAL		13,700	703	70.2	

Vehicle Speed Survey

Route No. 3

Start Time: 7:14

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Enparme Telica-Sn Jsidro	13,700	702	70.3	
2	Entrada a Argelia Km 115.5				
3					
4					
5					
6					
7					
TOTAL		13,700	702	70.3	

Vehicle Speed Survey

Route No. 3

Start Time: 10:14

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Enparme Telica-Sn Jsidro	13,700	708	69.7	
2	Entrada a Argelia Km 115.5				
3					
4					
5					
6					
7					
TOTAL		13,700	708	69.7	

Vehicle Speed Survey

Route No. 3

Start Time: 17:14

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Enparme Telica-Sn Jsidro	13,700	802	61.5	
2	Entrada a Argelia Km 115.5				
3					
4					
5					
6					
7					
TOTAL		13,700	802	61.5	

Vehicle Speed Survey

Route No. 4

Start Time: 7:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada A Malpaisillo	24.000	1.349	64.0	
2	Enp Telica-Sn Jsidro				
3					
4					
5					
6					
7					
TOTAL		24.000	1.349	64.0	

Vehicle Speed Survey

Route No. 4

Start Time: 10:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada A Malpaisillo	24.000	1.198	72.1	
2	Enp Telica-Sn Jsidro				
3					
4					
5					
6					
7					
TOTAL		24.000	1.198	72.1	

Vehicle Speed Survey

Route No. 4

Start Time: 17:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada A Malpaisillo	24.000	1.440	60.0	
2	Enp Telica-Sn Jsidro				
3					
4					
5					
6					
7					
TOTAL		24.000	1.440	60.0	

Vehicle Speed Survey

Route No. 4

Start Time: 7:25

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Enparme Telica-Sn Jsidro	24,000	1,320	65.5	
2	Entrada A Malpaisillo				
3					
4					
5					
6					
7					
TOTAL		24,000	1,320	65.5	

Vehicle Speed Survey

Route No. 4

Start Time: 10:21

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Enparme Telica-Sn Jsidro	24,000	1,320	65.5	
2	Entrada A Malpaisillo				
3					
4					
5					
6					
7					
TOTAL		24,000	1,320	65.5	

Vehicle Speed Survey

Route No. 4

Start Time: 17:25

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Enparme Telica-Sn Jsidro	24,000	1,409	61.3	
2	Entrada A Malpaisillo				
3					
4					
5					
6					
7					
TOTAL		24,000	1,409	61.3	

Vehicle Speed Survey

Route No. 5

Start Time: 7:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Emp Telica-Sn Jsidro	8,000	487	59.1	
2	Salida Leon-Chinandega				
3					
4					
5					
6					
7					
TOTAL		8,000	487	59.1	

Vehicle Speed Survey

Route No. 5

Start Time: 10:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Emp Telica-Sn Jsidro	8,000	579	49.7	
2	Salida Leon-Chinandega				
3					
4					
5					
6					
7					
TOTAL		8,000	579	49.7	

Vehicle Speed Survey

Route No. 5

Start Time: 17:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Emp Telica-Sn Jsidro	8,000	536	53.7	
2	Salida Leon-Chinandega				
3					
4					
5					
6					
7					
TOTAL		8,000	536	53.7	

Vehicle Speed Survey

Route No. 5 Start Time: 7:10
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Salida Leon-Chinandega	8.000	486	59.3	
2	Enp Telica-Sn Jsidro				
3					
4					
5					
6					
7					
TOTAL		8.000	486	59.3	

Vehicle Speed Survey

Route No. 5 Start Time: 10:11
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Salida Leon-Chinandega	8.000	550	52.4	
2	Enp Telica-Sn Jsidro				
3					
4					
5					
6					
7					
TOTAL		8.000	550	52.4	

Vehicle Speed Survey

Route No. 5 Start Time: 17:10
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Salida Leon-Chinandega	8.000	499	57.7	
2	Enp Telica-Sn Jsidro				
3					
4					
5					
6					
7					
TOTAL		8.000	499	57.7	

Vehicle Speed Survey

Route No. 6

Start Time: 7:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada A Nagarote	29,500	1,725	61.6	
2	Entrada Xiloa				
3	Interseccion Cuesta Del Plomo	2,400	132	65.5	
4	Interseccion Las Piedrecitas	4,600	355	46.6	
5					
6					
7					
TOTAL		36,500	2,212	59.4	

Vehicle Speed Survey

Route No. 6

Start Time: 10:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada A Nagarote	29,500	1,857	57.2	
2	Entrada Xiloa				
3	Interseccion Cuesta Del Plomo	2,400	183	47.2	
4	Interseccion Las Piedrecitas	4,600	353	46.9	
5					
6					
7					
TOTAL		36,500	2,393	54.9	

Vehicle Speed Survey

Route No. 6

Start Time: 17:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada A Nagarote	29,500	1,809	58.7	
2	Entrada Xiloa				
3	Interseccion Cuesta Del Plomo	2,400	176	49.1	
4	Interseccion Las Piedrecitas	4,600	366	45.2	
5					
6					
7					
TOTAL		36,500	2,351	55.9	

Vehicle Speed Survey

Route No. 6

Start Time: 7:39

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Interseccion Las Piedrecitas	4,600	335	49.4	
2	Interseccion Cuesta Del Plomo				
3	Entrada Xiloa	2,400	216	40.0	
4	Entrada A Nagarote	29,500	1,904	55.8	
5					
6					
7					
TOTAL		36,500	2,455	53.5	

Vehicle Speed Survey

Route No. 6

Start Time: 10:42

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Interseccion Las Piedrecitas	4,600	336	49.3	
2	Interseccion Cuesta Del Plomo				
3	Entrada Xiloa	2,400	175	49.4	
4	Entrada A Nagarote	29,500	1,602	66.3	
5					
6					
7					
TOTAL		36,500	2,113	62.2	

Vehicle Speed Survey

Route No. 6

Start Time: 17:40

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Interseccion Las Piedrecitas	4,600	309	53.6	
2	Interseccion Cuesta Del Plomo				
3	Entrada Xiloa	2,400	184	47.0	
4	Entrada A Nagarote	29,500	1,728	61.5	
5					
6					
7					
TOTAL		36,500	2,221	59.2	

Vehicle Speed Survey

Route No. 7 Start Time: 7:00
 Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada Al Coyotepe	13,800	682	72.8	
2	Entrada A Ticuantepe				
3	Cemaforo De La Colonia CentroAmerica	8,700	845	37.1	
4					
5					
6					
7					
TOTAL		22,500	1,527	53.0	

Vehicle Speed Survey

Route No. 7 Start Time: 10:00
 Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada Al Coyotepe	13,800	665	74.7	
2	Entrada A Ticuantepe				
3	Cemaforo De La Colonia CentroAmerica	8,700	504	62.1	
4					
5					
6					
7					
TOTAL		22,500	1,169	69.3	

Vehicle Speed Survey

Route No. 7 Start Time: 17:00
 Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada Al Coyotepe	13,800	780	63.7	
2	Entrada A Ticuantepe				
3	Cemaforo De La Colonia CentroAmerica	8,700	753	41.6	
4					
5					
6					
7					
TOTAL		22,500	1,533	52.8	

Vehicle Speed Survey

Route No. 7 Start Time: 7:29
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Cenaforo De La Colonia CentroAmerica	8.700	704	44.5	
2	Entrada A Ticuantepe				
3	Entrada Al Coyotepe	13.800	715	69.5	
4					
5					
6					
7					
TOTAL		22.500	1.419	57.1	

Vehicle Speed Survey

Route No. 7 Start Time: 10:24
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Cenaforo De La Colonia CentroAmerica	8.700	608	51.5	
2	Entrada A Ticuantepe				
3	Entrada Al Coyotepe	13.800	735	67.6	
4					
5					
6					
7					
TOTAL		22.500	1.343	60.3	

Vehicle Speed Survey

Route No. 7 Start Time: 17:26
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Cenaforo De La Colonia CentroAmerica	8.700	602	52.0	
2	Entrada A Ticuantepe				
3	Entrada Al Coyotepe	13.800	799	62.2	
4					
5					
6					
7					
TOTAL		22.500	1.401	57.8	

Vehicle Speed Survey

Route No. 8

Start Time: 7:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Enpalme Sn Benito				
2	Km 29 Sarida Ctro Viaje Tipitapa	5,400	291	66.8	
3	Entrada Tipitapa (Los Pollos)	8,700	424	73.9	
4	Interseccion Ctro Vieja Tipitapa (Cofradio)	6,500	331	70.7	
5	Semaforos Del Moyoreo (La Subasta)	6,000	351	61.5	
6					
7					
T O T A L		26,600	1,397	68.5	

Vehicle Speed Survey

Route No. 8

Start Time: 10:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Enpalme Sn Benito				
2	Km 29 Sarida Ctro Viaje Tipitapa	5,400	280	69.4	
3	Entrada Tipitapa (Los Pollos)	8,700	445	70.4	
4	Interseccion Ctro Vieja Tipitapa (Cofradio)	6,500	344	68.0	
5	Semaforos Del Moyoreo (La Subasta)	6,000	355	60.8	
6					
7					
T O T A L		26,600	1,424	67.2	

Vehicle Speed Survey

Route No. 8

Start Time: 17:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Enpalme Sn Benito				
2	Km 29 Sarida Ctro Viaje Tipitapa	5,400	312	62.3	
3	Entrada Tipitapa (Los Pollos)	8,700	454	69.0	
4	Interseccion Ctro Vieja Tipitapa (Cofradio)	6,500	377	62.1	
5	Semaforos Del Moyoreo (La Subasta)	6,000	351	61.5	
6					
7					
T O T A L		26,600	1,494	64.1	

Vehicle Speed Survey

Route No. 8

Start Time: 7:24

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Semaforos Del Moyoreo (La Subasta)				
2	Interseccion Ctro Vieja Tipitapa (Cofradio)	6,000	329	65.7	
3	Entrada Tipitapa (Los Pollos)	6,500	343	68.2	
4	Km 29 Sarida Ctro Viaje Tipitapa	8,700	450	69.6	
5	Enpalme Sn Benito	5,400	292	66.6	
6					
7					
T O T A L		26,600	1,414	67.7	

Vehicle Speed Survey

Route No. 8

Start Time: 10:25

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Semaforos Del Moyoreo (La Subasta)				
2	Interseccion Ctro Vieja Tipitapa (Cofradio)	6,000	342	63.2	
3	Entrada Tipitapa (Los Pollos)	6,500	357	65.5	
4	Km 29 Sarida Ctro Viaje Tipitapa	8,700	436	71.8	
5	Enpalme Sn Benito	5,400	296	65.7	
6					
7					
T O T A L		26,600	1,431	66.9	

Vehicle Speed Survey

Route No. 8

Start Time: 17:26

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Semaforos Del Moyoreo (La Subasta)				
2	Interseccion Ctro Vieja Tipitapa (Cofradio)	6,000	386	56.0	
3	Entrada Tipitapa (Los Pollos)	6,500	357	65.5	
4	Km 29 Sarida Ctro Viaje Tipitapa	8,700	453	69.1	
5	Enpalme Sn Benito	5,400	296	65.7	
6					
7					
T O T A L		26,600	1,492	64.2	

Vehicle Speed Survey

Route No. 9 Start Time: 7:00
 Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Enp. Nandaime				
2	Enp. El Guaracosto	9,300	461	72.6	
3	Enp. Catarina	9,400	490	69.1	
4	Entrada A Masaya (Moninbo)	5,800	292	71.5	
5					
6					
7					
TOTAL		24,500	1,243	71.0	

Vehicle Speed Survey

Route No. 9 Start Time: 10:00
 Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Enp. Nandaime				
2	Enp. El Guaracosto	9,300	586	57.1	
3	Enp. Catarina	9,400	540	62.7	
4	Entrada A Masaya (Moninbo)	5,800	317	65.9	
5					
6					
7					
TOTAL		24,500	1,443	61.1	

Vehicle Speed Survey

Route No. 9 Start Time: 17:00
 Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Enp. Nandaime				
2	Enp. El Guaracosto	9,300	580	57.7	
3	Enp. Catarina	9,400	626	54.1	
4	Entrada A Masaya (Moninbo)	5,800	313	66.7	
5					
6					
7					
TOTAL		24,500	1,519	58.1	

Vehicle Speed Survey

Route No. 9

Start Time: 7:30

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada A Masaya (Moninbo)				
2	Enp. Catarina	5,800	448	46.6	
3	Enp. El Guaracosto	9,400	474	71.4	
4	Enp. Nandaime	9,300	429	78.0	
5					
6					
7					
TOTAL		24,500	1,351	65.3	

Vehicle Speed Survey

Route No. 9

Start Time: 10:25

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada A Masaya (Moninbo)				
2	Enp. Catarina	5,800	385	54.2	
3	Enp. El Guaracosto	9,400	522	64.8	
4	Enp. Nandaime	9,300	498	67.2	
5					
6					
7					
TOTAL		24,500	1,405	62.8	

Vehicle Speed Survey

Route No. 9

Start Time: 17:26

Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Entrada A Masaya (Moninbo)				
2	Enp. Catarina	5,800	392	53.3	
3	Enp. El Guaracosto	9,400	653	51.8	
4	Enp. Nandaime	9,300	515	65.0	
5					
6					
7					
TOTAL		24,500	1,560	56.5	

Vehicle Speed Survey

Route No. 10

Start Time: 7:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Sapoa Interseccion Al Ostional				
		2,300	172	48.1	
2	Km 140.8 Pte Rio Ostional				
		4,800	311	55.6	
3	Km 136 Ruede rio Nacascolo				
		3,000	242	44.6	
4	Km 133 Rio Stateresa				
		10,800	539	72.1	
5	Interseccion Sn Juan Dei Sur (La Virgen)				
		10,500	465	81.3	
6	Rivas Km 112				
7					
TOTAL		31,400	1,729	65.4	

Vehicle Speed Survey

Route No. 10

Start Time: 10:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Sapoa Interseccion Al Ostional				
		2,300	128	64.7	
2	Km 140.8 Pte Rio Ostional				
		4,800	342	50.5	
3	Km 136 Ruede rio Nacascolo				
		3,000	435	24.8	
4	Km 133 Rio Stateresa				
		10,800	439	88.6	
5	Interseccion Sn Juan Del Sur (La Virgen)				
		10,500	534	70.8	
6	Rivas Km 112				
7					
TOTAL		31,400	1,878	60.2	

Vehicle Speed Survey

Route No. 10

Start Time: 17:00

Survey Date: 1993.4.21 Direction: To Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Sapoa Interseccion Al Ostional				
		2,300	127	65.2	
2	Km 140.8 Pte Rio Ostional				
		4,800	351	49.2	
3	Km 136 Ruede rio Nacascolo				
		3,000	200	54.0	
4	Km 133 Rio Stateresa				
		10,800	660	58.9	
5	Interseccion Sn Juan Del Sur (La Virgen)				
		10,500	530	71.3	
6	Rivas Km 112				
7					
TOTAL		31,400	1,868	60.5	

Vehicle Speed Survey

Route No. 10 Start Time: 7:29
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Rivas Km 112				
2	Interseccion Sn Juan Del Sur (La Virgen)	10,500	528	71.6	
3	Km 133 Rio Stateresa	10,800	680	57.2	
4	Km 136 Ruento rio Nacascolo	3,000	309	35.0	
5	Km 140.8 Pte Rio Ostional	4,800	563	30.7	
6	Sapoa Interseccion Al Ostional	2,300	136	60.9	
7					
TOTAL		31,400	2,216	51.0	

Vehicle Speed Survey

Route No. 10 Start Time: 10:35
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Rivas Km 112				
2	Interseccion Sn Juan Del Sur (La Virgen)	10,500	541	69.9	
3	Km 133 Rio Stateresa	10,800	659	59.0	
4	Km 136 Ruento rio Nacascolo	3,000	183	59.0	
5	Km 140.8 Pte Rio Ostional	4,800	343	50.4	
6	Sapoa Interseccion Al Ostional	2,300	252	32.9	
7					
TOTAL		31,400	1,978	57.1	

Vehicle Speed Survey

Route No. 10 Start Time: 17:42
 Survey Date: 1993.4.21 Direction: From Managua

No.	Check Points	Distance (m)	Time (Sec)	Travel time (km/h)	Remarks
1	Rivas Km 112				
2	Interseccion Sn Juan Del Sur (La Virgen)	10,500	680	55.6	
3	Km 133 Rio Stateresa	10,800	651	59.7	
4	Km 136 Ruento rio Nacascolo	3,000	174	62.1	
5	Km 140.8 Pte Rio Ostional	4,800	426	40.6	
6	Sapoa Interseccion Al Ostional	2,300	172	48.1	
7					
TOTAL		31,400	2,103	53.8	

Anexo 4-4 Variacion Semanal y Estacional de los
Volumenes de Trafico en Nicaragua en 1982

ESTIMATED COMPOSITION OF THE TRAFFIC - DAILY AND MONTHLY

Location No. 100
Section : MANAGUA--SAN BENITO
Year: 1982

Type of Vehicle	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
Pas. Car	6,286	6,423	5,822	8,465	6,326	7,570	7,979	5,639	6,324	6,017	6,441	7,046	6,695
Percent (%)	93.9	96.0	87.0	126.4	94.5	113.1	119.2	84.2	94.5	89.9	96.2	105.2	100.0
M-Bus	1,388	995	865	911	535	704	723	662	670	579	543	419	747
Percent (%)	181.8	133.2	115.8	122.0	71.6	94.2	96.8	88.6	89.7	77.5	72.7	56.1	100.0
H-Bus	1,671	1,571	1,442	1,788	1,378	1,585	1,510	1,469	1,726	1,591	1,643	1,806	1,598
Percent (%)	104.5	98.3	90.2	111.9	86.2	99.2	94.5	91.9	108.0	99.5	102.8	113.0	100.0
Pick-up	5,644	5,748	4,976	5,692	5,143	6,637	6,163	5,146	6,123	5,877	6,223	7,065	5,954
Percent (%)	94.8	96.5	83.6	95.6	86.4	111.5	103.5	103.2	102.9	98.7	104.5	118.7	100.0
Light-T	3,842	4,305	4,138	6,112	4,679	5,197	5,640	5,202	5,426	5,455	5,456	6,265	5,143
Percent (%)	74.7	83.7	80.5	118.8	91.0	101.0	109.7	101.1	105.5	106.1	106.1	121.8	100.0
Heavy-T	527	553	723	920	983	1,136	1,199	721	1,024	1,038	1,266	1,228	943
Percent (%)	55.9	58.6	76.7	97.5	104.2	120.4	127.1	76.4	108.6	110.1	134.2	130.2	100.0
Others	121	109	64	0	25	143	167	69	36	60	25	45	72
Percent (%)	168.1	151.4	88.9	0.0	34.7	198.6	231.9	95.8	50.0	83.3	34.7	62.5	100.0
Total	19,449	19,709	18,030	23,888	19,069	22,972	23,381	19,908	21,334	20,617	21,597	23,874	21,152
Percent (%)	91.9	93.2	85.2	112.9	90.2	108.6	110.5	94.1	100.9	97.5	102.1	112.9	100.0

Location No. 2800

ESTIMATED COMPOSITION OF THE TRAFFIC - DAILY AND MONTHLY

Section : MANAGUA--MATEARES
Year: 1982

Type of Vehicle	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
Pas. Car	5,116	4,870	0	3,954	3,645	2,915	3,370	2,958	3,047	2,850	3,631	3,751	3,342
Percent (%)	153.1	145.7	0.0	118.3	109.1	87.2	100.8	88.5	91.2	85.3	108.6	112.2	100.0
M-Bus	0	219	0	186	131	72	166	100	157	166	246	197	138
Percent (%)	0.0	158.3	0.0	134.5	94.7	52.0	134.5	72.3	113.5	120.0	177.8	142.4	100.0
H-Bus	649	724	0	603	712	530	685	614	780	724	279	721	585
Percent (%)	110.9	123.7	0.0	103.1	121.7	90.6	117.1	104.9	133.3	123.7	47.7	123.2	100.0
Pick-up	2,501	1,371	0	3,042	2,360	2,547	2,791	2,638	2,309	2,227	3,088	2,794	2,306
Percent (%)	108.5	59.5	0.0	131.9	102.4	110.5	121.0	114.4	100.1	96.6	133.9	121.2	100.0
Light-T	2,101	2,085	0	2,454	2,119	2,900	3,057	2,655	2,618	2,428	3,536	3,234	2,432
Percent (%)	86.4	85.7	0.0	100.9	87.1	119.2	125.7	108.2	107.6	99.8	145.4	133.0	100.0
Heavy-T	920	741	0	1,054	962	670	867	821	855	754	815	696	763
Percent (%)	120.6	97.1	0.0	138.2	126.1	87.8	113.6	107.6	112.1	98.8	106.8	91.2	100.0
Others	129	41	0	42	62	53	56	87	70	41	101	35	60
Percent (%)	215.9	68.6	0.0	70.3	103.8	88.7	93.7	145.6	117.2	68.6	169.0	58.6	100.0
Total	11,416	10,051	0	11,335	9,591	9,687	11,012	9,873	9,836	9,190	11,686	11,428	9,626
Percent (%)	118.6	104.4	0.0	117.8	103.8	100.6	114.4	102.6	102.2	95.5	121.5	118.7	100.0

ESTIMATED COMPOSITION OF THE TRAFFIC - DAILY AND MONTHLY

Location No. 400
 Section : MANAGUA--MASAYA
 Year: 1982

Type of Vehicle	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
Pas. Car	20,154	22,280	22,092	22,856	30,025	21,468	22,611	22,496	24,194	25,284	26,345	29,076	24,073
Percent (%)	83.7	92.6	91.8	94.9	124.7	89.2	93.9	93.4	100.5	105.0	109.4	120.8	100.0
H-Bus	321	260	191	132	150	109	149	99	86	95	47	17	133
Percent (%)	232.6	188.4	138.4	95.7	108.7	79.0	108.0	71.7	62.3	68.8	34.1	12.3	100.0
H-Bus	3,057	3,389	3,404	3,105	4,326	3,439	3,397	4,021	4,453	4,185	4,488	4,130	3,783
Percent (%)	80.8	89.6	90.0	82.1	114.4	90.9	89.8	106.3	117.7	110.7	118.6	109.2	100.0
Pick-up	8,573	9,596	9,411	9,105	12,083	9,985	9,446	10,452	11,946	11,569	12,040	12,598	10,568
Percent (%)	81.1	90.8	89.1	86.2	114.3	94.6	89.4	98.9	113.0	109.5	113.9	119.2	100.0
Light-T	3,880	4,197	4,241	3,781	4,662	3,952	4,079	4,138	4,834	4,713	5,104	4,968	4,379
Percent (%)	88.6	95.8	96.8	86.3	106.5	90.2	93.1	94.5	110.4	107.6	116.6	113.4	100.0
Heavy-T	571	464	517	423	611	361	368	446	424	491	528	471	473
Percent (%)	120.7	88.1	109.3	89.4	129.2	76.3	77.8	94.3	89.7	193.8	111.6	99.6	100.0
Others	315	524	572	409	353	159	465	238	160	55	33	54	278
Percent (%)	113.3	188.4	205.7	147.1	126.9	57.2	167.2	85.6	57.5	19.8	11.9	19.4	100.0
Total	36,871	40,710	40,428	39,811	52,210	39,483	40,515	41,890	46,097	46,393	48,585	51,314	43,692
Percent (%)	84.4	93.2	92.5	91.1	119.5	90.4	92.7	95.9	105.5	106.2	111.2	117.4	100.0

Location No. 1205

ESTIMATED COMPOSITION OF THE TRAFFIC - DAILY AND MONTHLY

Location No. 1205
 Section : CHINANDEGA--LEON
 Year: 1982

Type of Vehicle	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
Pas. Car	0	0	0	7,013	0	0	6,580	6,172	6,127	0	6,643	6,470	6,501
Percent (%)	0.0	0.0	0.0	107.9	0.0	0.0	101.2	94.9	94.2	0.0	102.2	99.5	100.0
H-Bus	0	0	0	431	0	0	363	429	367	0	277	235	350
Percent (%)	0.0	0.0	0.0	123.0	0.0	0.0	103.6	122.5	104.8	0.0	79.1	67.1	100.0
H-Bus	0	0	0	1,129	0	0	1,072	1,082	933	0	994	1,087	1,050
Percent (%)	0.0	0.0	0.0	107.6	0.0	0.0	102.1	103.1	88.9	0.0	94.7	103.6	100.0
Pick-up	0	0	0	4,105	0	0	4,774	4,302	4,130	0	4,192	4,311	4,302
Percent (%)	0.0	0.0	0.0	95.4	0.0	0.0	111.0	100.0	96.0	0.0	97.4	100.2	100.0
Light-T	0	0	0	3,710	0	0	4,642	4,373	3,930	0	3,694	4,104	4,076
Percent (%)	0.0	0.0	0.0	91.0	0.0	0.0	113.9	107.3	96.4	0.0	90.6	100.7	100.0
Heavy-T	0	0	0	1,249	0	0	779	1,348	932	0	881	902	1,015
Percent (%)	0.0	0.0	0.0	123.0	0.0	0.0	76.7	132.6	91.8	0.0	86.8	88.9	100.0
Others	0	0	0	319	0	0	214	173	208	0	238	263	236
Percent (%)	0.0	0.0	0.0	135.3	0.0	0.0	90.7	73.4	88.2	0.0	100.9	111.5	100.0
Total	0	0	0	17,956	0	0	18,424	17,879	16,827	0	16,919	17,372	17,530
Percent (%)	0.0	0.0	0.0	102.4	0.0	0.0	105.1	102.0	94.9	0.0	96.5	99.1	100.0

TRAFFIC VOLUME

Point No. 400 (Managua-Masaya)

Month	Year: 1982							Average	Percent (%)
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday		
January	7980.3	8162.5	8088.0	8028.5	7693.4	7799.3	6545.5	7756.8	104.2
February	8056.7	7895.8	7238.0	6833.0	7845.5	8204.0	6461.3	7504.9	100.8
March	7898.8	7876.4	7819.8	7617.3	7718.5	7847.8	6002.8	7540.2	101.3
April	7954.7	8111.3	8076.0	7602.2	8078.8	7722.5	6223.5	7681.3	103.2
May	7108.7	7115.7	7256.3	6966.3	7555.8	7876.3	6282.5	7167.4	96.3
June	7788.8	7903.0	7720.0	8280.3	8319.5	8487.8	7197.0	7956.6	106.9
July	8015.5	8002.0	7687.0	7405.5	8108.3	8022.0	7548.0	7826.9	105.2
August	6873.2	6575.6	6833.5	6794.0	7334.8	7153.0	5190.2	6679.2	89.7
September	6345.7	6220.3	6442.0	7082.6	7345.0	7326.8	5460.0	6603.2	88.7
October	7308.3	7293.3	7377.3	7647.0	7624.0	7486.8	6038.4	7253.6	97.5
November	7699.2	7822.0	7707.7	7813.8	8203.3	8334.8	6112.5	7670.5	103.1
December	7704.5	8017.8	7346.0	8091.3	7854.0	8410.3	6250.3	7667.7	103.0
Average	7561.2	7583.0	7466.0	7513.5	7807.6	7889.3	6276.0	7442.4	100.0
Percent (%)	101.6	101.9	100.3	101.0	104.9	106.0	84.3	100.0	

TRAFFIC VOLUME

Point No. 1205 (Chinandega-Leon)

Month	Year: 1982							Average	Percent (%)
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday		
January	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
February	4435.0	4351.0	4650.0	4500.0	4786.0	4095.0	2810.0	4232.4	115.4
March	4377.4	4512.6	4656.8	4665.3	4725.0	4181.8	2688.8	4244.0	115.7
April	4324.5	4361.8	4109.0	3974.0	4091.4	3742.0	2835.5	3919.7	106.9
May	4043.3	4097.0	4020.0	4194.5	4284.5	3553.7	2692.0	3840.7	104.7
June	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
July	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
August	3955.5	3824.5	4213.0	3836.0	3880.0	3267.0	2047.0	3574.7	97.5
September	3485.0	3259.8	3280.2	3668.2	3800.0	3362.5	1925.0	3255.8	88.8
October	3557.3	3636.0	3665.5	3682.0	3941.0	3483.4	2056.4	3431.7	93.6
November	3581.3	3000.4	3631.8	3533.3	3905.3	3334.3	2124.0	3301.5	90.0
December	3718.3	3790.3	3528.0	3602.4	3355.4	2617.0	1831.8	3206.2	87.4
Average	3942.0	3871.5	3972.7	3950.6	4085.4	3515.2	2334.5	3667.4	100.0
Percent (%)	107.5	105.6	108.3	107.7	111.4	95.8	63.7	100.0	

Anexos 4-5 Tabla OD Actual - 1993 -

YEAR=1993

TYPE OF VEHICLE VEHICULOS LIVIANOS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	99	TOT	
1	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	4	6	1	0	0	26	3	20	200	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	96	0	359	
3	0	9	0	0	0	0	0	1	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	
4	0	16	0	0	0	0	0	27	16	152	438	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	652	
5	0	0	0	0	0	9	0	0	0	0	52	4	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	67	
6	0	0	0	0	8	0	0	0	0	5	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	
7	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
8	0	39	0	32	0	2	0	0	0	0	794	4	0	1	0	0	0	0	5	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	884	
9	0	6	0	16	0	0	0	0	0	0	190	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	214	
10	0	21	0	172	1	2	0	0	0	0	1352	14	1	3	1	0	7	0	8	3	0	6	0	2	0	0	0	0	0	0	0	0	0	0	1809	
11	10	230	13	274	31	72	28	847	147	1681	0	216	9	45	1	0	180	5	91	10	42	273	35	12	20	0	2	175	28	21	2	4321	2	4321		
12	0	0	0	2	0	0	0	1	2	36	168	0	1	0	0	0	0	0	0	0	1	1	3	0	1	0	0	0	0	0	0	0	0	0	216	
13	0	0	0	0	0	0	0	0	0	1	13	0	0	4	0	0	1	0	15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	
14	0	0	0	0	0	0	0	0	1	0	41	0	1	0	0	0	1	0	8	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	53	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17	0	1	0	1	0	0	0	0	0	4	181	1	2	1	0	0	0	12	3	0	18	149	9	0	0	0	0	0	0	0	0	0	0	0	362	
18	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	7	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	11	
19	0	0	0	0	2	0	0	0	0	0	104	1	19	14	0	0	5	0	0	1	0	0	0	13	17	0	0	0	0	0	0	0	0	0	177	
20	0	0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	8	
21	0	2	0	0	0	0	0	0	0	0	50	0	0	0	0	0	7	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	77	
22	0	10	0	1	0	0	0	0	4	307	1	2	1	0	0	0	157	1	6	0	8	0	87	7	0	0	0	0	0	0	0	0	0	0	598	
23	0	5	0	0	0	0	0	0	0	46	0	0	2	0	0	4	0	0	0	0	7	72	0	0	0	0	0	0	0	0	0	0	12	0	151	
24	0	0	0	0	0	0	0	0	0	14	0	0	5	0	0	0	41	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	91	
25	0	0	0	0	1	0	0	0	0	21	0	0	0	0	0	0	19	0	0	1	0	0	0	28	0	0	0	0	0	0	0	0	0	0	70	
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
31	0	0	0	0	0	0	0	1	2	0	208	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	211
32	0	0	0	0	0	0	0	0	0	0	28	0	0	2	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	44
33	0	50	0	0	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	11	0	0	122	
99	3	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
TOT	10	389	17	512	65	87	28	710	171	1504	4366	243	35	80	2	1	370	18	193	16	76	540	134	61	72	0	2	182	48	141	11	10486	11	10486		

*** TABLA DE ORIGEN Y DESTINO ***

YEAR-1993

TYPE OF VEHICLE MICRO BUS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	99	TOT	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4	0	0	0	0	0	0	0	9	0	24	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132
5	0	0	0	0	0	10	0	0	0	0	4	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
6	0	0	0	0	13	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
7	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8	0	2	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94
9	0	0	0	0	7	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
10	0	0	0	0	35	0	3	0	0	0	73	26	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141
11	3	19	0	43	3	18	5	144	4	116	0	39	1	2	0	0	57	0	3	1	10	21	7	1	5	0	0	0	0	0	42	2	2	0	548	
12	0	0	0	0	0	0	0	0	0	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
13	0	0	0	0	0	0	0	0	0	0	1	0	0	17	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
14	0	0	0	0	0	0	0	0	0	3	5	0	12	0	0	0	1	0	17	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	40
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	3	81	0	4	2	0	0	0	2	1	0	4	48	0	0	0	0	0	0	0	0	0	0	0	0	0	145
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	33
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT	4	23	0	102	23	33	5	154	4	147	485	70	22	34	0	0	98	2	53	11	15	105	7	24	10	0	0	0	0	42	5	2	0	0	1492	

*** TABLA DE ORIGEN Y DESTINO ***

YEAR=1993

TYPE OF VEHICLE AUTO BUS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	99	TOT					
1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
2	0	0	0	0	0	0	0	1	0	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54		
3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
4	0	0	0	0	0	0	0	0	5	25	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	126		
5	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9		
6	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10		
7	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12			
8	0	1	0	3	0	0	0	0	0	0	106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12			
9	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110			
10	0	0	0	0	0	0	0	0	0	0	138	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37			
11	8	49	0	99	10	23	28	46	129	238	0	15	10	58	0	0	94	0	33	9	25	93	5	7	7	7	0	0	0	0	43	15	9	2	1056	109				
12	0	0	0	0	0	0	0	0	0	6	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29			
13	0	0	0	0	0	0	0	0	0	0	3	0	0	2	0	0	16	0	2	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29			
14	0	0	0	0	0	0	0	0	0	0	43	0	2	0	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29			
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50			
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
17	0	0	0	0	0	0	0	0	0	0	53	0	19	0	0	0	0	2	0	0	0	2	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
18	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	118		
19	0	0	0	0	0	0	0	0	0	0	26	0	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4			
20	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37		
21	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5		
22	0	0	0	0	0	0	0	0	0	0	82	0	1	0	0	0	40	0	0	0	1	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11		
23	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17		
24	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	5	0	5	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	44	
25	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16		
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17		
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
31	0	0	0	0	0	0	0	0	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
33	0	4	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT	8	54	0	127	10	23	28	47	134	269	790	21	32	54	0	0	119	2	50	9	28	185	24	13	12	0	0	0	0	0	43	23	9	0	0	0	2	2176		

*** TABLA DE ORIGEN Y DESTINO ***

YEAR-1992

TYPE OF VEHICLE CAMIONETA

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	39	TOT	
1	0	0	0	0	0	0	0	0	0	2	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	
2	0	0	2	16	0	0	0	16	3	137	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	239	
3	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
4	1	7	0	0	0	0	0	11	32	155	439	3	0	5	0	0	0	0	2	0	0	3	1	0	0	0	0	0	0	0	1	0	1	1	662	
5	1	0	0	2	0	16	0	0	0	8	87	3	7	2	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	129	
6	0	0	0	0	22	0	1	0	0	4	107	1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141	
7	0	0	0	0	0	0	0	0	0	3	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	
8	0	25	0	42	0	1	0	0	0	0	414	0	0	0	0	0	1	0	0	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	1	497
9	2	13	0	66	0	0	0	0	0	0	125	0	0	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	212	
10	0	22	0	378	8	8	0	0	20	0	1076	34	5	17	0	0	2	0	6	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	1484	
11	18	214	12	505	98	113	47	280	88	876	0	89	58	180	1	0	274	4	71	59	59	231	14	14	26	0	0	0	0	0	182	20	0	0	3533	
12	0	0	0	6	2	1	0	3	0	32	112	0	3	9	0	0	4	0	3	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	178	
13	0	0	0	1	2	0	0	0	5	5	36	0	0	105	0	0	5	0	9	5	0	3	0	0	0	0	0	0	0	0	0	0	0	0	176	
14	0	2	0	1	0	0	1	0	0	10	225	2	91	0	0	0	5	1	25	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	369	
15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17	0	3	0	1	1	0	0	0	1	4	163	1	6	11	0	0	0	12	6	4	11	150	23	0	0	0	0	0	0	1	0	3	2	0	403	
18	0	0	0	0	0	0	0	0	0	0	4	0	1	3	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
19	1	0	0	0	2	0	0	0	0	3	73	3	16	39	0	0	3	0	0	15	0	2	0	15	49	0	0	0	0	0	0	0	0	0	0	221
20	0	0	0	0	0	0	0	0	0	0	52	0	0	12	0	0	3	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	
21	0	0	0	0	0	0	0	1	0	0	20	0	0	0	0	0	9	0	0	0	0	17	0	1	0	0	0	0	0	0	0	0	0	0	49	
22	0	2	0	0	0	0	0	0	0	2	211	0	5	1	0	0	126	2	1	0	8	0	59	4	0	0	0	0	0	0	0	0	0	0	0	425
23	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	2	0	0	0	2	70	0	0	0	0	0	0	0	0	0	0	0	0	0	90
24	0	0	0	0	0	0	0	0	0	0	13	3	0	0	0	0	0	0	27	0	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	101
25	0	0	0	0	0	0	0	0	0	2	42	0	3	0	0	0	0	0	58	0	0	0	0	0	77	0	0	0	0	0	0	0	0	0	0	182
26	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
27	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
28	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
31	0	0	0	1	0	0	0	3	0	0	147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	151
32	0	0	0	1	0	0	0	0	0	0	25	0	0	5	0	0	0	0	0	0	0	10	0	1	0	0	0	0	0	0	0	0	0	0	0	42
33	0	10	0	1	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	24
99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT	23	293	14	922	136	139	48	315	149	1109	3014	139	199	397	1	0	448	19	220	85	85	500	97	114	134	0	0	0	0	1	193	28	69	2	9500	

*** TABLA DE ORIGEN Y DESTINO ***

YEAR=1993

TYPE OF VEHICLE CANTON

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	TOT
1	0	0	0	1	0	0	0	0	1	0	1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	
2	0	0	1	4	0	0	0	0	14	0	5	118	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	184	
3	0	3	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
4	0	5	0	0	1	0	0	19	3	79	130	2	1	3	0	1	6	0	1	0	0	0	0	0	0	0	0	0	0	2	0	5	0	252		
5	0	7	1	2	0	10	0	1	0	5	63	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	8	0	106			
6	0	9	0	7	7	0	0	0	0	0	100	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	124		
7	0	0	0	4	1	0	0	0	0	3	89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97		
8	1	22	0	23	3	0	2	0	0	0	144	2	0	0	0	0	0	0	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	232		
9	1	3	0	17	0	0	0	0	0	0	89	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	115		
10	1	22	0	49	2	3	0	10	11	0	231	19	0	11	3	0	2	0	16	0	2	2	0	3	0	0	0	0	0	0	0	0	0	407		
11	11	140	7	175	51	48	60	124	69	370	0	80	35	83	4	2	110	1	49	38	17	51	4	11	24	0	1	0	182	39	10	16	1823			
12	0	0	0	3	1	2	0	14	0	5	50	0	0	4	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	84		
13	0	0	0	0	0	1	0	0	3	3	34	0	0	19	1	0	1	0	9	3	0	1	0	0	2	0	0	0	0	0	0	0	0	77		
14	0	0	0	8	0	0	0	0	0	3	88	5	20	0	0	0	1	0	9	3	2	3	0	0	0	0	0	0	0	1	0	0	0	143		
15	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5		
16	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
17	0	0	0	0	0	0	0	0	4	1	79	0	8	2	0	0	0	7	3	0	1	34	0	0	0	1	0	0	0	1	3	0	0	146		
18	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	3	0	0	0	0	1	0	0	0	0	0	0	1	5	0	0	0	15		
19	0	0	0	1	0	0	0	0	0	2	4	45	1	4	12	0	1	0	0	2	0	1	0	21	47	0	0	0	1	0	0	0	0	142		
20	0	0	0	1	0	0	0	0	0	7	3	28	0	0	13	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70		
21	0	3	0	1	0	0	0	0	0	0	16	0	0	2	0	0	3	0	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	31		
22	0	0	0	1	0	0	0	0	2	0	3	79	1	1	1	0	12	1	1	0	16	0	8	0	0	0	0	0	0	4	0	0	0	130		
23	0	1	0	0	0	0	0	0	0	0	21	0	0	1	0	0	1	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	33		
24	0	0	0	1	0	0	0	0	0	0	12	1	0	2	0	0	0	0	0	33	0	0	0	0	20	0	0	0	0	0	0	0	0	69		
25	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	21	0	2	0	0	0	0	0	0	0	0	0	0	0	0	73		
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
30	0	0	0	1	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
31	0	0	0	7	3	0	0	10	3	3	195	3	0	3	0	1	4	2	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	12	
32	0	0	0	1	0	0	0	2	0	0	52	0	0	1	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	239	
33	0	12	0	0	0	0	0	0	0	0	16	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	74		
99	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31		
TOT	14	227	9	329	70	64	63	201	99	488	1755	116	71	164	9	4	140	11	165	48	40	126	15	55	100	0	1	0	220	47	58	18	4732			

*** - TABLA DE ORIGEN Y DESTINO ***

YEAR=1993

TYPE OF VEHICLE SEMI-REMOLQUE

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	39	TOT	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	9	110	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	121
5	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
6	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
7	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	
8	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	
9	0	0	0	0	0	0	0	0	0	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	
10	0	0	0	0	0	0	0	0	0	0	95	0	2	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	105	
11	0	28	0	103	6	20	14	28	72	79	0	4	0	6	0	0	27	4	23	4	56	176	11	5	14	0	0	0	0	23	112	284	84	2	1185	
12	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
13	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
14	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
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16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	19	
18	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
19	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
20	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
21	0	0	0	0	0	0	0	0	0	3	4	66	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	81	
22	0	0	0	0	0	0	0	0	0	0	152	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5	0	0	161	
23	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
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25	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
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27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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31	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	
32	0	0	0	0	0	0	0	0	2	2	208	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	216	
33	0	0	0	0	0	0	0	0	0	0	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122	
99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
TOT	0	28	0	128	6	20	14	28	77	94	980	4	2	6	0	0	29	4	28	4	63	193	11	6	14	0	0	0	23	113	299	87	2	2253		

*** TABLA DE ORIGEN Y DESTINO ***

YEAR-1993

TYPE OF VEHICLE OTROS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	99	TOT	
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3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
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7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
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10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
11	0	0	0	0	2	0	2	0	0	0	0	2	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	39
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TOT	0	10	0	0	0	2	0	2	0	114	26	4	0	0	0	0	23	3	1	0	0	33	0	0	0	0	0	0	0	0	2	0	0	0	229	

*** TABLA DE ORIGEN Y DESTINO ***

YEAR=1993

TYPE OF VEHICLE TOTAL

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TOT	59	1030	40	2128	312	368	189	1457	634	4145	2026	599	361	745	12	5	1257	59	710	173	307	1672	288	273	342	0	3	0	1	28	793	452	387	35	50858	

**ANEXO 6-1 CAMINOS Y ESTRUCTURAS DANADAS (1/5)
POR EL HURACAN "JOAN" EN OCTUBRE DE 1988**

TRAMO	AREA DANADA	TIPO DE DANO
REGION I		
Palacaguina-Quilali	Sector Pericon	-Grietas en el camino -Pequenos deslizamientos de taludes -Una (1) alcantarilla destruida
REGION III		
San Francisco Libre	Culverts	--Doce (12) alcantarillas de tuberia de 48" de diametro destruidas
Ramal a Xiloa	Km 15+200 Km 24+25 Km 35+35	-Canal de desagüe, obstruido debido al deslizamiento de taludes
Managua-Masaya	Km 12+100 Km 14	-El ala de los puentes sufrio dano debido al deslizamiento de taludes
REGION IV		
Masaya-Tipitapa (22.2 km)	Km 44 1/2	--Erosion de terraplenes en la via --Canales de desagüe obstruidos
Masaya-Granada	Km 35 to 37	-Deslizamientos de taludes -Erosion de terraplenes en la via
Masaya-Empalme Guanacaste (25 km)	Km 33 Km 43 to 45	-Canales de desagüe obstruidos -Canales de desagüe socavados
Granada-Empalme Guanacaste (10 km)	Cuesta La Fuente	--Deslizamiento de taludes y erosion de la via y hombros
Empalme Guanacaste-Empalme Grajino (10 km)	Puente Mayaris (5 m) Puente La Farraca (10 km) Puente El Arroyo (24 m)	-Puente socavado -Puente socavado -Puente socavado

**ANEXO 6-1 CAMINOS Y ESTRUCTURAS DANADAS (2/5)
POR EL HURACAN "JOAN" EN OCTUBRE DE 1988**

TRAMO	AREA DANADA	TIPO DE DANO
Empalme Nandaime--Rivas (41 km)	Puente Ochomogo (54 m)	- Acceso del puente socavado
Jinotepe--Empalme Nandaime (19 km)	Canales de drenaje	- Socavamiento
Alrededores de la Laguna de Apoyo (4.5 km)	Sistema de drenaje	- Socavamiento - Deslizamiento de taludes
Granada--Paso Panaloya (21 km)	Puente Tepetate	- Destruccion de la estructura
Sn.Marcos--Ticuantepo (20 km)	Las Gradass	- Erosion de terraplenes y de canales de drenaje
REGION V		
San Benito--Rama	Km 220	- Deslizamiento de taludes de 25 m de altura y 80 m de largo
Sto Domingo--Los Chiles Kuriwancito	Puente La Cusuca (40 m) Puente Siquia	- Destruccion de la superestructura del puente - Acceso y cimentacion danados
La Gateada--Nueva Guinea	Puente Rio Rama (40 m)	- Abertura del puente obstruida por troncos de madera
Sector Camoapa	Puente Verberena Puente Tierra (30 m)	- Acceso destruido - Superestructura destruida
Muy Muy--Boaco	Puente Saca (20 m)	- Viga de concreto y de acero danadas
Rio Rama--Amado Caballero (8 km)	Puente de madera Puente de madera de construccion	- Cuatro (4) puentes de madera destruidos - Destruccion total

TRAMO	AREA DANADA	TIPO DE DANO
Las Miradas-Taloliba (22 km)	Alcantarillas Puente de madera de construccion (10 m) Puentes de madera	-Cuatro (4) alcantarillas destruidas y otras cuatro (4) danadas -Dos (2) puentes de madera de construccion destruidos -Seis (6) puentes de madera destruidos
El Triunfo-El Almendro (22 km)	Puentes de madera Puente de madera (18 m) Superficie de la via	-Dos (2) puentes de madera destruidos -Destruccion total -Deslizamiento de taludes en cuatro (4) puntos -Destruccion de la superficie de la via 400 m
San Juan-El Chamosla (9 km)	Puente de madera de construccion (12 m) Superficie de la via	-Dos (2) puentes de madera de construccion destruidos -Destruccion en 3 puntos, 200 m.
Nueva Guinea-Verdum (5 km)	Puente de madera de construccion (15 m) Superficie de la via	-Destruccion total -0.5 km de la superficie de rodamiento danadas
Nueva Guinea-La Fonseca	Alcantarillas Puente de madera de construccion (8 m, 12 m)	-Destruccion en 8 puntos 2 km -Four (4) culverts partially damaged -Destruction
Nueva Guinea-Nuevo Leon (15.5 km)	Superficie de la via Alcantarillas	-Destructions at 8 points, 2 km -Four (4) culverts destroyed
Nuevo Leon-Jose Benito Escobar (10 km)	Puente de madera de construccion Superficie de la via	-Two (2) bridges destroyed -Destruction of 2 km

TRAMO	AREA DANADA	TIPO DE DANO
Nueva Guinea--Talolinga (28 km)	Puentes de madera de construccion Superficie de la via	-Destrucion de dos (2) puentes -Destrucion de 2 km
Nueva Guinea--San Antonio	Puente de madera de construccion (14 m)	-Destrucion total
Nueva Guinea--Los Pintos (5 km)	Puente de madera de construccion (12 m)	-Destrucion total
REGION VI		
Sebaco--Matagalpa--Jinotega (58 km)	Km 140 Km 145 Km 146 Km 153 Km 156-159	-Deslizamiento de taludes -Agrietamiento lateral (izq.) -Agrietamiento lateral (centro) -Agrietamiento lateral (der.) -Deslizamiento de taludes
El Tuma--La Dalia--La Mora (55 km)	Km 180	-Erosion y asentamiento
La Mora--El Carmen--Waslala Iyas (87 km)	Cuesta La LLorona Rancho Grande Zinica Puentes *El Carmen (22 m) *Babasca (18 m) *Manceras (18 m) *Yaosca #1 (12 m) *Yaosca #2 (48 m) *Waslala #1 (18 m) *Waslala #2 (18 m) *Zinica (22 m)	-Agrietamiento transversal -Erosion de terraplen en la via -Deslizamiento de taludes -Destrucion
Jinotega--Asturias--Pantasma Wiwili (97 km)	Sector Hosp.de Apanas Cuesta Wale Puente El Cua (60 m)	-Inundacion -Deslizamiento de taludes en 3 puntos -Destrucion

TRAMO	AREA DANADA	TIPO DE DANO
San Gabriel--Mancotal Las Cruces	Alcantarillas	--Erosion
Sta.Rita--San Dionisio Esquipulas--Muy Muy (55 km)	Sn.Dionisio--Sta.Rita	--Deslizamiento de taludes
Sn.Ramon--El Jobo--Matiguas (54 km)	Sector Yucul Cusuca Cusile (alcantarillas)	--Deslizamiento de taludes --Erosion --Erosion
Matiguas--Rio Blanco Mulukuku (82 km)	Sector Paiwita Sector La Ponzola Sector Rio Blanco Puentes *Puente Bul Bul *Puente Wilike (25 m) *Puente Mulukuku (152 m) *Puente Wilikon (65 m)	--Asentamiento y deslizamiento de taludes en 7 puntos --Asentamiento en 2 puntos --Asentamiento y deslizamiento de taludes --Losa danada --Destruccion --Superestructura danada --Destruccion
Pueblo Nuevo--La Colonia-- Abisnia--El Cua--Bocay (89 km)		--Agrietamiento profundo en la superficie
Matagalpa--Apante (32 km)		--Deslizamiento de taludes
La Mora--La Chata--El Portillo El Cua (30 km)		--Slope collations and cracks

Anexos 7-1 Lista de Revision Ambiental

(1) Seccion - 1 Entre Managua y Masaya

Environmental items	: Condition *1 :	Problems
	: P *2 : E *3 :	
I. Living environment		
1) Air quality	: 3 : 2	:- passing city area
- Heavy machine		- dust from bare
- Transportation		ground by cutting
- Dust		and embankment
- Quarry		- traffic safety
- Traffic		- emission gas from
		automobiles
2) Water quality	: 2-3 : 2	:- SS from bare
- Cutting		ground by cutting
- Embankment		and embankment
- Discharge of		- treatment of sur-
water pumped		face water
- Quarry		
- Waste		
- Drainage		
- Traffic		
3) Soil contamination	: 3 : 3 :	
- Waste		
4) Noise and vibration	: 2-3 : 1-2	:- traffic increase
- Heavy machine		- construction by
- Transportation		heavy machine
- Traffic		
- Bus stop area		
5) Land subsidence	: 3 : 3 :	
- Excavation		
- Pumping		
6) Odor	: 3 : 3 :	
- Waste		
- Asphalt plant		
II. Natural environment		
7) Land	: 2 : 1-2	:- cutting at narrow
- Cutting		part, collapse
- Embanking		- dropped stone
- Quarry		- unused soil
- Waste dump area		- traffic safety
- Soil dump area		

(Continued..)

8) Soil	: 2-3	: 2-3	:- bridge
- Soil erosion			- side gutter
- Soil dump area			- Drainage
- Drainage			- resedimentation
9) Water	: 2	: 2	:- Drainage
- Cutting			- damaged in side
- Embankment			water course
- Water course			
- Bridge			
- Drainage			
10) Underground water	: 3	: 3	:- water well
- Cutting			
- Pumping			
- waste			
11) Sea	: 3	: 3	:
- Filling			
- Water course			
- Drainage			
12) Flora and fauna	: 3	: 2	:- emission gas
- Cleaning			- cutting
- Cutting			- domestic animals
- Embankment			
- Parking area			
- Greening			
13) Landscape	: 3	: 3	:- planting
- Cleaning			
- Cutting			
- Embankment			
- Greening			
III. Social environment			
14) Waste	: 3	: 2	:- bus stop area
- Waste			
- Worker's facilities			
- Bus stop area			
15) Historical and cultural monuments	: 3	: 3	:- access road
16) Traffic	: 3	: 2	:- traffic safety
17) Hazards	: 2	: 2	:- cutting
- Flood			- water course
- Earthquake			
- Landslide			
- Collapse			

(Continued..)

18) Relocation	:	3	:	3	:
19) Socio-economic condition	:	3	:	3	:
20) Cutting district	:	3	:	3	:
21) Safety	:	2	:	2	:- side walk in town site
- Sidewalk					
- Domestic animals					- traffic increase
22) Recreation facilities	:	3	:	3	:
23) Water right and right of common	:	3	:	3	:

- * 1 : 1 : Major influence
- 2 : Small influence
- 3 : None influence
- 4 : Not clear
- * 2 : Present environmental condition
- * 3 : Environmental evaluation (Examination)

(2) Seccion - 2 Entre Masaya y San Benito

Environmental items	: Condition *1 :		Problems
	: P *2	: E *3	
I. Living environment			
1) Air quality	: 3	: 2	:- emission gas at town site
- Heavy machine			- traffic increase
- Transportation			- passing in a town site
- Dust			- dust from cut and banked area
- Quarry			
- Traffic			
2) Water quality	: 3	: 2-3	:- SS from cut and banked area
- Cutting			
- Embankment			
- Discharge of water pumped			
- Cleaning			
- Quarry			
- Waste			
- Drainage			
- Traffic			
3) Soil contamination	: 3	: 3	:
- Quarry			
- Waste			
4) Noise and vibration	: 2-3	: 2-3	:- passing in the town site
- Heavy machine			- traffic increase
- Transportation			
- Quarry			
- Traffic			
- Bus stop area			
5) Land subsidence	: 2	: 2	:- Tipitapa river, wetland
- Embankment			
- Pumping			
6) Odor	: 2-3	: 2-3	:- illegal disposal
- Waste			

(Continued..)

II. Natural environment					
7) Land	:	3	:	3	:
- Cutting					
- Embanking					
- Soil dump area					
- Waste dump area					
8) Soil	:	2-3	:	2-3	:- drainage
- Soil erosion					- resedimentation
- Soil dump area					
- Drainage					
9) Water	:	2-3	:	2-3	:- drainage
- Cutting					- gutter
- Embankment					- resedimentation
- Water course					
- Bridge					
- Drainage					
10) Underground water	:	3	:	3	:
- Cutting					
- Pumping					
- waste					
11) Sea	:	3	:	3	:
- Filling					
- Water course					
- Drainage					
12) Flora and fauna	:	2-3	:	4	:- deforestation
- Cleaning					
- Cutting					
- Embankment					
- Parking area					
- Greening					
13) Landscape	:	3	:	3	:- planting
- Cleaning					
- Cutting					
- Embankment					
- Landscape					
- Greening					

(Continued..)

III. Social environment

14) Waste	:	2-3	:	2-3	:- illegal disposal
- Waste					
- Worker's facilities					
- Bus stop area					
15) Historical and cultural monuments	:	3	:	3	:
16) Traffic	:	3	:	2-3	:- traffic increase
17) Hazards	:	3	:	2-3	:- flood
- Flood					
- Earthquake					
- Landslide					
- Collapse					
18) Relocation	:	3	:	3	:
19) Socio-economic condition	:	4	:	4	:
20) Cutting district	:	3	:	3	:
21) Safety	:	2-3	:	2-3	:- side walk
- Sidewalk					
- Domestic animals					
22) Recreation facilities	:	3	:	2-3	:
23) Water right and right of common	:	4	:	4	:

-
- * 1 : 1 : Major influence
 - 2 : Small influence
 - 3 : None influence
 - 4 : Not clear
 - * 2 : Present environmental condition
 - * 3 : Environmental evaluation (Examination)

(3) Seccion - 3 Entre Masaya y Nandaime

Environmental items	: Condition #1 :	Problems
	: P *2 : E *3 :	
I. Living environment		
1) Air quality	: 3 : 2-3	:- passing in town site
- Heavy machine		- dust from bare ground
- Transportation		
- Dust		
- Quarry		
- Traffic		
2) Water quality	: 2-3 : 2-3	:- SS from bare ground
- Cutting		
- Embankment		
- Cleaning		
- Quarry		
- Waste		
- Drainage		
- Traffic		
3) Soil contamination	: 3 : 3 :	
- Quarry		
- Waste		
4) Noise and vibration	: 3 : 2-3	:- traffic increase
- Heavy machine		
- Transportation		
- Quarry		
- Traffic		
- Bus stop area		
5) Land subsidence	: 3 : 3 :	
- Excavation		
- Pumping		
6) Odor	: 3 : 2-3	:- waste
- Waste		
II. Natural environment		
7) Land	: 2-3 : 2	:- cutting narrow part
- Cutting		- unstable slope
- Embanking		
- Quarry		
- Waste dump area		
- Soil dump area		

(Continued..)

8) Soil	:	2-3	:	2	:	- Drainage
- Soil erosion						- resedimentation
- Soil dump area						
- Drainage						
9) Water	:	2-3	:	2	:	- Drainage
- Cutting						- resedimentation
- Embankment						
- Water course						
- Bridge						
- Drainage						
10) Underground water	:	3	:	3	:	
- Cutting						
- Pumping						
- waste						
11) Sea	:	3	:	3	:	
- Filling						
- Water course						
- Drainage						
12) Flora and fauna	:	2-3	:	2-3	:	- cutting
- Cleaning						- planting
- Cutting						
- Embankment						
- Parking area						
- Greening						
13) Landscape	:	3	:	3	:	
- Cleaning						
- Cutting						
- Embankment						
- Landscape						
- Greening						
III. Social environment						
14) Waste	:	3	:	2-3	:	- illegal disposal
- Waste						
- Worker's facilities						
- Bus stop area						
15) Historical and cultural monuments	:	3	:	3	:	
16) Traffic	:	3	:	2-3	:	- traffic safety
						- traffic increase

(Continued..)

17) Hazards	:	3	:	2-3	:- flood in small scale
- Flood					
- Earthquake					
- Landslide					
- Collapse					
18) Relocation	:	3	:	3	:
19) Socio-economic condition	:	4	:	4	:
20) Cutting district	:	3	:	3	:
21) Safety	:	2-3	:	2-3	:- traffic safety
- Sidewalk					- sidewalk
- Domestic animals					
22) Recreation facilities	:	3	:	2-3	:- landscape
23) Water right and right of common	:	4	:	4	:

- * 1 : 1 : Major influence
- 2 : Small influence
- 3 : None influence
- 4 : Not clear
- * 2 : Present environmental condition
- * 3 : Environmental evaluation (Examination)

(4) Seccion - 4 Entre Telica y San Ishidro

Environmental items	: Condition #1 :	Problems
	: P *2 : E *3 :	
I. Living environment		
1) Air quality	: 3 : 2-3	:- dust from bare ground
- Heavy machine		
- Transportation		- asphalt plant
- Concrete plant		- heavy machines
- Asphalt plant		
- Dust		
- Quarry		
- Traffic		
2) Water quality	: 3 : 2-3	:- SS from bare ground
- Cutting		
- Embankment		- SS from quarry
- Concrete plant		- asphalt plant
- Asphalt plant		
- Quarry		
- Waste		
- Drainage		
- Traffic		
3) Soil contamination	: 3 : 3 :	
- Asphalt plant		
- Quarry		
- Waste		
4) Noise and vibration	: 3 : 2-3 :	
- Heavy machine		
- Transportation		
- Asphalt plant		
- Quarry		
- Traffic		
- Bus stop area		
5) Land subsidence	: 3 : 2-3	:- embankment
- Excavation		
- Pumping		
6) Odor	: 3 : 3 :	
- Waste		
- Asphalt plant		

(Continued..)

II. Natural environment

- | | | | | | |
|-----------------------|---|-----|---|-----|--------------------|
| 7) Land | : | 2-3 | : | 2-3 | :- cutting |
| - Cutting | | | | | - embankment |
| - Banking | | | | | - collapse |
| - Quarry | | | | | - soft ground |
| - Waste dump area | | | | | |
| - Soil dump area | | | | | |
| 8) Soil | : | 2-3 | : | 2-3 | :- drainage |
| - Soil erosion | | | | | - resedimentation |
| - Soil dump area | | | | | |
| - Drainage | | | | | |
| 9) Water | : | 2-3 | : | 2-3 | :- drainage during |
| - Cutting | | | | | wet season |
| - Embankment | | | | | - gutter |
| - Water course | | | | | - wetland |
| - Bridge | | | | | |
| - Drainage | | | | | |
| 10) Underground water | : | 3 | : | 3 | : |
| - Cutting | | | | | |
| - Pumping | | | | | |
| - waste | | | | | |
| 11) Sea | : | 3 | : | 3 | : |
| - Filling | | | | | |
| - Water course | | | | | |
| - Drainage | | | | | |
| 12) Flora and fauna | : | 2-3 | : | 2-3 | :- passing wetland |
| - Cleaning | | | | | - cutting |
| - Cutting | | | | | |
| - Embankment | | | | | |
| - Parking area | | | | | |
| - Planting | | | | | |
| 13) Landscape | : | 3 | : | 3 | : |
| - Cleaning | | | | | |
| - Cutting | | | | | |
| - Embankment | | | | | |
| - Landscape | | | | | |
| - Planting | | | | | |

(Continued..)

III. Social environment

14) Waste	:	3	:	2-3	:- village site
- Waste					
- Worker's facilities					
- Bus stop area					
15) Historical and cultural monuments	:	3	:	3	:
16) Traffic	:	3	:	2-3	:- traffic increase
17) Hazards	:	2-3	:	2-3	:- landslide
- Flood					- flood
- Earthquake					
- Landslide					
- Collapse					
18) Relocation	:	3	:	3	:
19) Socio-economic condition	:	4	:	4	:
20) Cutting district	:	3	:	3	:
21) Safety	:	2	:	2	:- village and town sites
- Sidewalk					
- Domestic animals					
22) Recreation facilities	:	3	:	2-3	:- traffic increase
23) Water right and right of common	:	3	:	4	:

-
- * 1 : 1 : Major influence
 - 2 : Small influence
 - 3 : None influence
 - 4 : Not clear
 - * 2 : Present environmental condition
 - * 3 : Environmental evaluation (Examination)

Sistema Nacional de Areas Silvestres de Nicaragua

No.	Nombre	Has	Decreto	Fecha	Recursos que protege
RESERVAS BIOLÓGICAS (I)					
60	Rio Indio- Maliz	295,000	# 527	17/04/1990	Pluviosetiva Tropical pristinas / Humedales/mamíferos en peligro de extinción / Manatíes
54	Cayos Miskitos	50,000	# 43-91	04/11/1991	Bancos de coral/paños submarinos / tortugas marinas/ Manatíes
PARQUES NACIONALES (II)					
13	Volcan Maaya	5,100	# 79	24/05/1979	Formaciones volcánicas/sucesiones vegetales pioneras/Bosque tropical seco/fauna asociada
19	Archipiélago Zapatera	5,227	# 1194	05/02/1993	Sistema Insular/Recursos arqueológicos/Bosque Tropical seco/fauna asociada
49	Saslaya	15,000	# 1789	08/1971	Bosque de Nebulosa/Bosque humedo tropical/fauna asociada
MONUMENTO NACIONAL (III)					
69	Archipiélago Solentiname	18,930	# 527	17/04/1990	Sistema Insular / Bellezas Escénicas / Recursos Arqueológicos
MONUMENTO HISTÓRICO (III)					
71	Fortaleza la Inmucuada	375	# 527	17/04/1990	Sitio Histórico de la época colonial (1700)
REFUGIO DE VIDA SILVESTRES (IV)					
20	Rio Escalante - Chococente	4,800	# 1294	11/08/1983	Andación maeva de tortugas marinas/bosques tropical seco/fauna asociada
70	Los Guatizos	43,750	# 527	17/04/1990	Mamíferos en peligro de extinción / Bosque humedo tropical/Aves Acuáticas Migratorias
RESERVAS GENÉTICAS (IV)					
37	Yucul	4,826	# 525	17/04/1990	Bosque de Pinares Patula ssp. Tecumananli / fauna asociada
RESERVAS NATURALES (IV)					
1	Volcan Cosigüina	12,420	# 13	02/1958	Bosques Tropical Seco / Fauna asociada
2	Estero Padre Ramos	6,800	# 1320	08/08/1983	Manglares del Pacifico/ Fauna Marina / Estuarios
3	Delta del Estero Real	35,000	# 1320	08/08/1983	Manglares del Pacifico/ Fauna Marina / Estuarios
4	Isla Juan Venado	4,600	# 1320	08/08/1983	Manglares del Pacifico/ Fauna Marina / Estuarios
5	Complejo Volcánico San Cristóbal	17,850	# 1320	08/08/1983	Bosque Tropical Seco/Limito Sur de los pinares del continente/fauna asociada
6	Complejo Volcánico Telica - Rola	9,096	# 1320	08/08/1983	Bosque Tropical Seco / Fauna Asociada
7	Complejo Volcánico Piles - El Hoyo	7,422	# 1320	08/08/1983	Bosque Tropical Seco/ Fauna Asociada
8	Complejo Volcánico Momotombo -	6,500	# 1320	08/08/1983	Bosque Tropical Seco / Fauna Asociada / Sistema Insular/Bellezas Escénicas
9	Península de Chiltepe	1,800	# 1320	08/08/1983	Bosque Tropical Seco / Lagunas Cratericas / fauna asociada *

Anexos 8-1 Uso Actual del Suelo

CLASE	HOJA No 1 BOCIAT	HOJA No 2 PUERTO CABEZAS	HOJA No 3 ESTELI	HOJA No 4 SUNA	HOJA No 5 PRINZAPOLKA	HOJA No 6 CHINANDIGA	HOJA No 7 MANAGUA	HOJA No 8 JUGALPA	HOJA No 9 BUJEFIELDS	HOJA No 10 GRAMADA	HOJA No 11 SAN CARLOS	HOJA No 12 PUNTA MICO	SUPERFICIE TOTAL POR CLASE (ha)	EN %
al						52,600.0	63,200.0			1,460.0			147,260.0	1.13%
ca						34,560.0	28,000.0		1,300.0	19,000.0			82,860.0	0.64%
cl			54,000.0				9,000.0	640.0		32,100.0	2,500.0		96,240.0	0.76%
ba						500.0	650.0						1,150.0	0.01%
ta			3,900.0										3,900.0	0.03%
ar			1,250.0										1,250.0	0.01%
U1		150.0	15,000.0	2,550.0		54,620.0	196,400.0	4,500.0	900.0	44,600.0	11,000.0		66,750.0	0.47%
U2		52,600.0	241,000.0	217,000.0	15,500.0	27,760.0	167,000.0	704,000.0	21,450.0	60,600.0	223,000.0	190.0	354,650.0	2.72%
D		75,200.0	250.0	1,800.0	450.0	8,800.0	167,438.0	174,000.0	3,280.0	48,358.0	182,775.0	5,600.0	1,756,510.0	13.52%
P1							3,562.0			7,144.0	8,225.0		18,931.0	0.15%
sa						5,040.0	90,400.0				26,050.0		121,490.0	0.93%
se					3,500.0	48,500.0				48,000.0			96,000.0	0.75%
bc		166,000.0	400,766.0	1,453,300.0	183,000.0	45,940.0	200,000.0	679,000.0	297,400.0	44,800.0	644,000.0	313,700.0	5,699,306.0	43.69%
br			287,193.0		41,000.0	800.0	320,000.0	28,830.0	6,510.0	81,800.0	58,260.0		813,393.0	6.28%
bp		6,950.0	19,000.0		25,000.0		1,540.0		9,900.0		13,000.0	5,900.0	81,790.0	0.62%
ps		15,600.0	282,000.0		18,000.0								384,600.0	2.96%
pl		6,900.0	760.0		15,700.0	84,000.0			2,000.0				89,300.0	0.69%
pm														
pc														
co														
ma														
tsi														
pa														
es														
rF														
R														
i														
eg														
SUPERFICIE TOTAL (ha)	1,077,650.0	785,220.0	1,433,252.0	1,786,150.0	578,770.0	349,278.0	1,736,140.0	1,812,990.0	510,370.0	749,000.0	1,749,210.0	12,500.0	12,964,914.0	100.00%

FUENTE: MINISTERIO DE PLANIFICACION INSTITUTO NICARAGUENSE DE ESTUDIOS TERRITORIALES

USO POTENCIAL DE LA TIERRA

VOCACION DE LA TIERRA	CLASE DE UTILIZACION	SIMBOLO	AREA Ha	%
AGRICOLA	Cultivos Anuales Intensivos	CAI	579,714	5.72%
	Cultivos Anuales Extensivos	CAE	103,486	1.02%
	Cultivos Perennes Intensivos	CPI	728,860	7.19%
	Cultivos Perennes Extensivos	CPE	1,879,579	18.54%
(SUBTOTAL)			3,291,639	32.47%
AGRICOLA/ FORESTAL	Sistemas Agroforestales	SAF	105,550	1.04%
(SUBTOTAL)			105,550	1.04%
PECUARIA	Pastoreo Intensivo	PI	658,080	6.49%
	Pastoreo Extensivo (Suelos Acidos)	PEo	56,273	0.56%
	Pastoreo Extensivo (Suelos Sodificados)	PEs	17,425	0.17%
	Pastoreo Extensivo (Suelos Superficiales)	PEp	95,905	0.95%
	Pastoreo Extensivo (15-30 % de Pendiente)	PET	81,386	0.80%
(SUBTOTAL)			909,069	8.97%
PECUARIA/ FORESTAL	Sistemas SilvoPastoriles	SSP	255,384	2.52%
(SUBTOTAL)			255,384	2.52%
FORESTAL	Bosques de Humedad	Bh	1,419,989	14.01%
	Bosques de Produccion	Be	2,134,052	21.05%
	Bosques de Proteccion	Bp	1,365,873	13.47%
(SUBTOTAL)			4,919,914	48.54%
VIDA SILVESTRE	Vegetacion de Humedades	Vh	10,318	0.10%
	Plantas y Esteros	PE	145,839	1.44%
	Conos y Lavas Volcanicas	Cv	32,881	0.32%
	Gases Volcanicos	Gv	8,662	0.09%
(SUBTOTAL)			197,700	1.95%
VOCACION ASOCIADA 60%+40%/1	Cultivos Perennes Intensivos con Bosques de Proteccion	CPI+Bp	30,313	0.30%
	Bosques de Proteccion con Bosques de Produccion	Bp+Be	41,749	0.41%
	Sistemas SilvoPastoriles con Bosques de Produccion	SSP+Be	194,150	1.92%
	(SUBTOTAL)			266,212
VOCACION CON INCLUSIONES 70%+30%/2	Cultivos Perennes Intensivos con Inclusiones de Cultivos Anuales Intensivos	CPI (CAI)	106,196	1.05%
	Sistemas Agroforestales con Inclusiones de Bosques de Produccion	SAF (Be)	6,999	0.07%
	Bosques de Produccion con Inclusiones de Cultivos Anuales Intensivos	Be (CAI)	5,904	0.06%
	Bosques de Produccion con Inclusiones de Cultivos Perennes Extensivos	Be (CPE)	14,792	0.15%
	Bosques de Produccion con Inclusiones de Cultivos Perennes Extensivos y Sistemas Sivopastoriles	BE (CPE/SSP)	217,289	2.14%
	Bosques de proteccion con Inclusiones de Cultivos Perennes Intensivos	Bp (CPI)	10,000	0.10%
	Bosques de Produccion con Inclusiones de Cultivos Perennes Intensivos y Sistemas Agroforestales	BE (CAI/SAF)	191,041	1.88%
(SUBTOTAL)			552,221	5.45%
TOTAL			10,136,735	100.00%

/1: EL 60% DEL AREA CORRESPONDE AL PRIMER SIMBOLO Y EL 40% AL SEGUNDO SIMBOLO

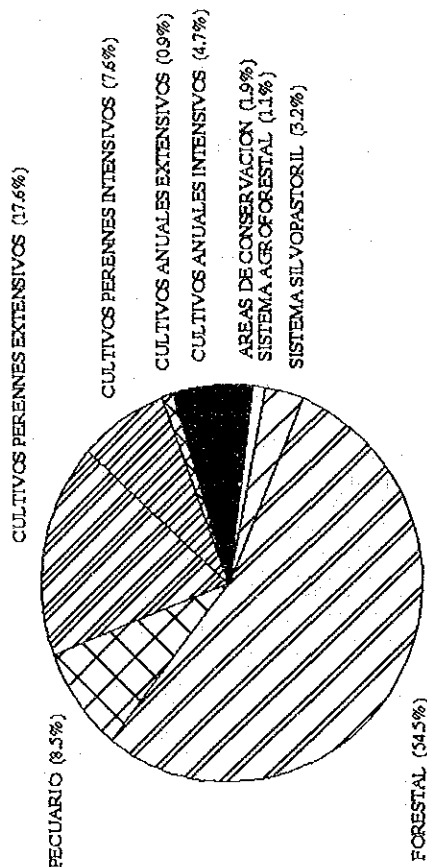
/2: EL 70% DEL AREA CORRESPONDE AL PRIMER SIMBOLO Y EL 30% AL (LOS) SIMBOLO (S) ENTRE PARENTESIS.

Source: INETER

CONFRONTACION USO ACTUAL Y USO POTENCIAL DE LA TIERRA

CLASE DE UTILIZACION	TOTALES PARCIALES		CLASE DE CONFRONTACION					
	AREA Km2	ADECUADO	%	SOBREUTILIZADO	%	SUBUTILIZADO	%	
CULTIVOS ANUALES INTENSIVOS (CAI)	5,054	2,847	56.33%	687	13.59%	1,520	30.08%	
CULTIVOS ANUALES EXTENSIVOS (CAE)	1,000	500	50.00%	400	40.00%	100	10.00%	
CULTIVOS PERENNES INTENSIVOS (CPI)	8,163	3,750	45.94%	2,413	29.56%	2,000	24.50%	
CULTIVOS PERENNES EXTENSIVOS (CPE)	18,759	11,338	60.44%	7,421	39.56%		0.00%	
PECUARIO (P)	9,090	4,817	52.99%	3,999	43.99%	274	3.01%	
FORESTAL (B)	58,150	25,859	44.47%	27,841	47.88%	4,450	7.65%	
SISTEMA SILVOPASTORIL (SSP)	3,452	2,150	62.28%	902	26.13%	400	11.59%	
SISTEMA AGROFORESTAL (SAF)	1,125	455	40.44%	414	36.80%	256	22.76%	
AREAS DE CONSERVACION (VS)	1,977	1,886	95.40%	91	4.60%		0.00%	
TOTAL ESTUDIADO	106,770	53,602	50.20%	44,168	41.37%	9,000	8.43%	
AREA SIN ESTUDIOS	13,500							
CUERPOS DE AGUA	10,352							
TOTAL NACIONAL	130,622							

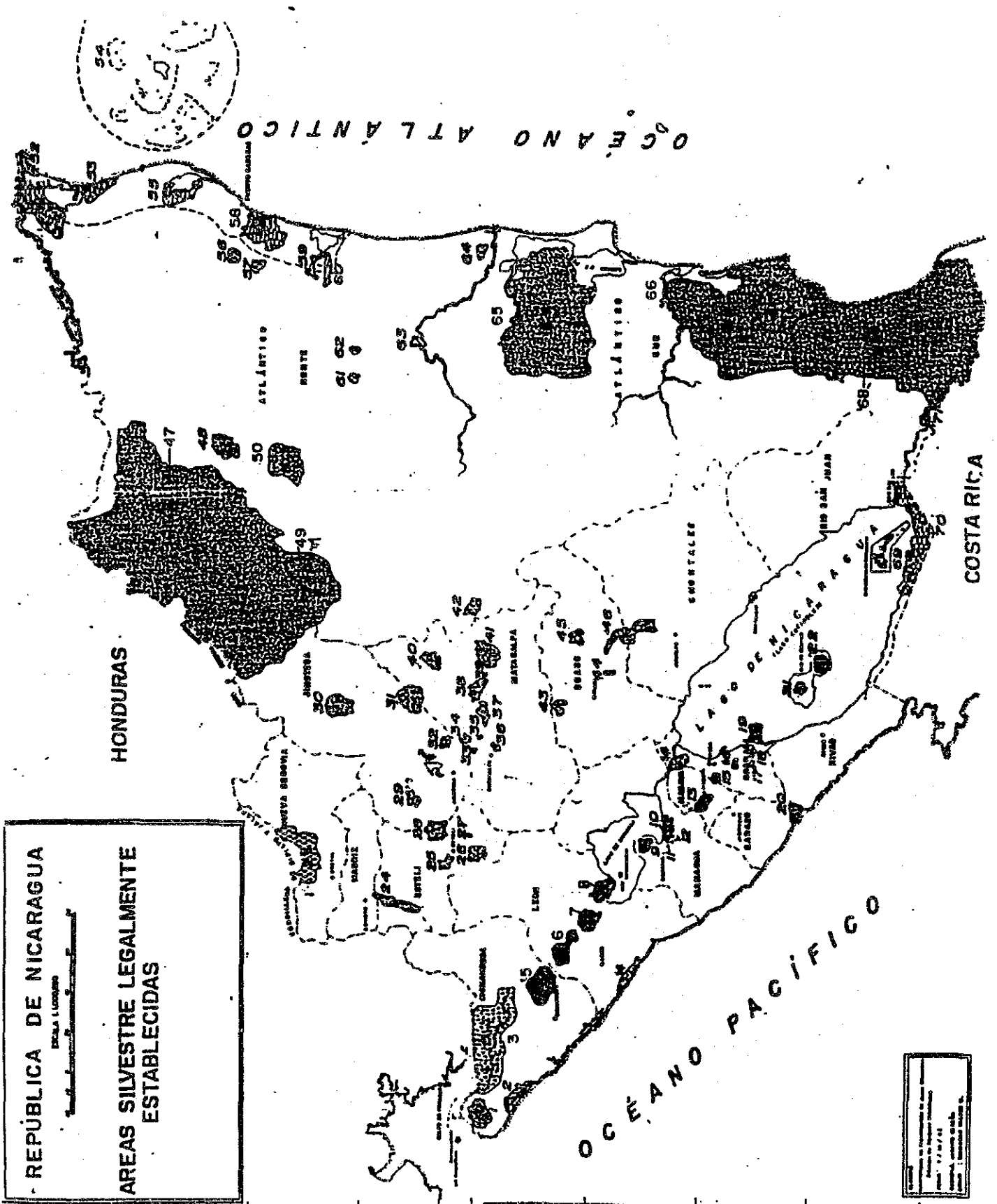
Source: INETER



REPÚBLICA DE NICARAGUA

ESCALA 1:100,000

AREAS SILVESTRE LEGALMENTE ESTABLECIDAS



Sistema Nacional de Areas Silvestres de Nicaragua

No. Nombre	Has	Decreto	Fecha	Recursos que protege
RESERVAS BIOLÓGICAS (I)				
53	Rio Indio- Matz	295,000 # 527	17/04/1980	Pluvioselva Tropical Prístina / Humedales/mamíferos en peligro de extinción / Manatíes
54	Cayos Misquito	50,000 # 43-81	04/11/1991	Banco de coral/pastos submarinos / tortugas marinas/ Manatíes
PARQUES NACIONALES (II)				
13	Volcan Masaya	5,100 # 79	24/05/1979	Formaciones volcánicas/eucesiones vegetales pioneras/Bosque tropical seco/fauna asociada
19	Archipiélago Zapatera	5,227 # 1194	05/02/1983	Sistema Insular/Recursos arqueológicos/Bosque Tropical seco/fauna asociada
49	Saslaya	15,000 # 1789	09/1971	Bosque de Nebilseiva/Bosque húmedo tropical/fauna asociada
MONUMENTO NACIONAL (III)				
69	Archipiélago Solentiname	15,830 # 527	17/04/1990	Sistema insular / Bellezas Escénicas / Recursos Arqueológicos
MONUMENTO HISTÓRICO (III)				
71	Fortaleza la Inmaculada	375 # 527	17/04/1990	Sitio Histórico de la época colonial (1700)
REFUGIO DE VIDA SILVESTRES (IV)				
20	Rio Escalante - Chococente	4,800 # 1284	11/08/1983	Anidación masiva de tortugas marinas/bosques tropical seco/fauna asociada
70	Los Guatuzos	43,750 # 527	17/04/1990	Mamíferos en peligro de extinción / Bosque húmedo tropical/Aves Acuáticas Migratorias
RESERVAS GENÉTICAS (IV)				
37	Yucul	4,826 # 526	17/04/1990	Bosque de Pinares Patula esp. Tecunumanil / fauna asociada
RESERVAS NATURALES (IV)				
1	Volcan Cosigüina	12,420 # 13	08/1956	Bosques Tropicales Seco / Fauna asociada
2	Estero Padre Ramo	8,000 # 1320	08/09/1983	Manglares del Pacífico/ Fauna Marina / Estuarios
3	Delta del Estero Real	35,000 # 1320	08/09/1983	Manglares del Pacífico/ Fauna Marina / Estuarios
4	Isla Juan Venado	4,600 # 1320	08/09/1983	Manglares del Pacífico/ Fauna Marina / Estuarios
5	Complejo Volcánico San Cristóbal	17,850 # 1320	08/09/1983	Bosque Tropical Seco/Límite Sur de los pinares del continente/fauna asociada
6	Complejo Volcánico Telica - Rola	9,088 # 1320	08/09/1983	Bosque Tropical Seco/ Fauna Asociada
7	Complejo Volcánico Piles - El Hoyo	7,422 # 1320	08/09/1983	Bosque Tropical Seco/ Fauna Asociada
8	Complejo Volcánico Momotombo -	6,500 # 1320	08/09/1983	Bosque Tropical Seco / Fauna Asociada / Sistema Insular/Bellezas Escénicas
9	Península de Chiltepe	1,800 # 1320	08/09/1983	Bosque Tropical Seco / Lagunas Cratericas / fauna asociada

Sistema Nacional de Areas Silvestres de Nicaragua

10	Laguna de Tiscapa	40	# 42-91	04/11/1991	Belleza Escenica / Recurso Hidrico
11	Laguna de Asosca	140	# 42-91	04/11/1991	Fuente de agua potable de la capital/Belleza Escenica
12	Laguna de Nejapa	220	# 42-91	04/11/1991	Bellezas Escenicas / Recursos Hidricos
14	Laguna de Tisma	10,295	# 1320	08/09/1993	Humedales / Aves Migratorias / Recursos pesqueros
15	Laguna de Apoyo	3,500	# 42-91	04/11/1991	Belleza Escenica / Recursos Hidricos / Fauna del trópico seco
16	Volcan Mombacho	2,487	# 1320	08/09/1993	Bosque de Nebelsteiva / Bosque
17	Laguna de Mecatepe	1,200	# 1320	08/09/1993	Humedales / Sistema Lagunas / Fauna Asociada
18	Rio Manaree	1,100	# 1320	08/09/1993	Humedales / Sistema Riberino / Fauna Asociada
21	Volcan Concepcion	2,200	# 1320	08/09/1993	Bosque Tropical Seco / Fauna
22	Volcan Madera	4,100	# 1320	08/09/1993	Bosque de Nebelsteiva / Fauna / Laguna Craterica
23	Cordillera Dipilto y Jalapa	41,200	# 42-91	04/11/1991	Bosques de Pinos / Maximinol / Ocarcapa
24	Tapesomolo / Pataste	8,700	# 42-91	04/11/1991	Bosque Humedo tropical
25	Cerro Quiabuc (Las Brises)	3,630	# 42-91	04/11/1991	Bosques de Nebelsteiva/Bosque Humedo tropical y fauna asociada
26	Cerro Tisey - Estanzuela	6,400	# 42-91	04/11/1991	Asociaciones de pinus ocarpa y Quercus /orquideas
27	Cerro Tomabu	860	# 42-91	04/11/1991	Asociaciones de Pinus ocarpa y Quercus
28	Mesas de Monopotenté	7,500	# 42-91	04/11/1991	Bosque tropical Humedo / Paisaje Escenico
29	Volcan Yali	3,500	# 42-91	04/11/1991	Asociaciones de pinus ocarpa y Liquidarba
30	Cerro Kilambe	10,128	# 42-91	04/11/1991	Bosque Humedo Tropical/ Cabecera de rics de abastecimiento de agua potable
31	Macizos de Pefias Blancas	11,308	# 42-91	04/11/1991	Bosque Humedo Tropical/Bosque Nebelsteiva/cabeceras rics abastecimiento agua potable
32	Cerro Datanil - El Diablo	2,218	# 42-91	04/11/1991	Bosque muy Humedo / Nebelsteiva
33	Cerro El Arenal	678	# 42-91	04/11/1991	Bosque Humedo Tropical
34	Fila Cerro Frio - La Cumpilda	1,761	# 42-91	04/11/1991	Bosque Humedo Tropical
35	Salto Rio Yalca	445	# 42-91	04/11/1991	Bosque de Galeria / Belleza Escenica / orquideas en peligro de extinción
36	Apante	1,230	# 42-91	04/11/1991	Asociacion pino ocarpa y quercus/cabecera rics abastecimientos agua potable
38	Guabule	1,100	# 42-91	04/11/1991	Bosque Tropical - Sub Humedo
39	Cerro Pancasan	330	# 42-91	04/11/1991	Bosque Tropical - Sub Humedo
40	Cerro Kusikawas	4,780	# 42-91	04/11/1991	Bosque Tropical Humedo
41	Sierra Kiragua	8,987	# 42-91	04/11/1991	Bosque Humedo Tropical
42	Cerro Musun	4,142	# 42-91	04/11/1991	Bosque Humedo Tropical/Bosque Nebelsteiva/cabeceras rics abastecimiento agua potable
43	Cerro Cumalca - Cerro Alegre	5,000	# 42-91	04/11/1991	Bosque Tropical Humedo / Nebelsteiva
44	Cerro Mombachito - La Vieja	940	# 42-91	04/11/1991	Bosque Humedo Tropical premontano
45	Fila Masigüe	4,580	# 42-91	04/11/1991	Bosque Humedo Tropical
46	Sierra Amerrique	12,073	# 42-91	04/11/1991	Bosque Tropical Semi-Humedo
48	Cerro Cola Blanca	22,200	# 42-91	04/11/1991	Bosque Tropical Humedo / Bosque de Nebelsteiva

Sistema Nacional de Areas Silvestres de Nicaragua

50	Cerro Bana Cruz	10,130	# 42-91	04/11/1991	Bosque Tropical Humedo
51	Laguna Tala - Sulimas	31,400	# 43-91	04/11/1991	Bosque Tropical Humedo de sitios pantanosos
52	Cabo Viejo	5,800	# 43-91	04/11/1991	Bosque Tropical Humedo de sitios pantanosos
53	Laguna Blemuna - Raya	11,800	# 43-91	04/11/1991	Manglares / Anidación de Aves / Manatiles
55	Laguna de Pahara	10,200	# 43-91	04/11/1991	Vegetación Acuatica / Anidación de aves
56	Yulu	1,000	# 42-91	04/11/1991	Bosque de Pinos Caribea de alto valor genético
57	Kilgna	1,000	# 42-91	04/11/1991	Bosque de Pinos caribea de alto valor genético
58	Laguna Yuhu Karala	25,300	# 43-91	04/11/1991	Manglares del Atlantico
59	Laguna Kukalaya	3,500	# 43-91	04/11/1991	Manglares del Atlantico
60	Laguna Layaalca	1,800	# 43-91	04/11/1991	Manglares del Atlantico
61	Alamikamba	2,100	# 42-91	04/11/1991	Bosque de Pinos Caribea de alto valor genético
62	Limbaika	1,800	# 42-91	04/11/1991	Bosque de Pinos Caribea de alto valor genético
63	Makantaka	2,000	# 42-91	04/11/1991	Bosque de Pinos Caribea de alto valor genético
64	Llanos de Karawala	2,000	# 42-91	04/11/1991	Bosque de Pinos Caribea de alto valor genético
67	Cordillera de Yolaina	40,000	# 42-91	04/11/1991	Bosque Humedo Tropical / Bosques de nebliselva
RESERVA NACIONAL DE RECURSOS (VI)					
47	Boaswas	730,000	# 44-91	04/11/1991	Bosque Humedo Tropical (Selva tropical más extensa de Centro America)
RESERVAS FORESTALES					
65	Cerro Wawashan	231,500	# 42-91	04/11/1991	Bosque Humedo Tropical Pluvioselva / Zonas Estuarinas
			# 36-92	26/06/1992	asociaciones de pinos caribea / Manglares del Atlantico
66	Cerro Silva	256,000	# 42-91	04/11/1991	Bosque Humedo Tropical Pluvioselva / Zonas Estuarinas
			# 36-92	26/06/1991	Manglares del Atlantico.
	TOTAL	2,153,855			Extensión Territorial de Nicaragua 130,000 Km2

Fuente:

Jacinto Cedeño B.
 Departamento Ordenamiento de Areas Silvestres
 Servicio de Parques Nacionales - IRENA Agosto 31/92

Anexos 8-2 Datos de Población

Population by Municipality (Estimation 1/3)

ZONE	REGION	DEPARTMENT	D-NUMBER	Municipality	STAT N-No.	ZONE N-No.	AREA(km2)	POP 90	POP 91	POP 92	POP 93
25	1	Nueva Segovia	1	Santa Maria	1	1	168	3,393	3,426	3,570	3,687
25	1	Nueva Segovia	1	Macuelizo	2	2	250	3,388	3,524	3,674	3,793
25	1	Nueva Segovia	1	Dipilto	3	3	95	3,713	3,864	4,026	4,158
25	1	Nueva Segovia	1	Ocotal	4	4	104	35,704	36,747	37,875	38,795
25	1	Nueva Segovia	1	Monzonte	5	5	242	3,909	4,066	4,240	4,378
25	1	Nueva Segovia	1	San Fernando	6	6	269	5,071	5,277	5,499	5,679
25	1	Nueva Segovia	1	Ciudad Antigua	7	7	154	2,355	2,451	2,555	2,633
25	1	Nueva Segovia	1	El Jicaró(Ciudad Sandi'no)	8	8	404	15,321	15,943	16,616	17,158
25	1	Nueva Segovia	1	Jalapa	9	9	629	29,865	31,077	32,389	33,446
25	1	Nueva Segovia	1	Murra	10	10	479	6,342	6,287	6,551	6,765
25	1	Nueva Segovia	1	Quilali'	11	11	339	14,571	15,162	15,802	16,318
24	1	Madriz	2	Sonoto	1	1	474	26,910	28,002	29,183	30,136
24	1	Madriz	2	Totogalpa	2	2	137	7,682	7,994	8,331	8,603
24	1	Madriz	2	Telpaneca	3	3	272	9,469	9,853	10,269	10,694
24	1	Madriz	2	San Juan del Ri'o Coco	4	4	221	12,325	13,454	14,021	14,479
24	1	Madriz	2	Yalagu'ina	5	5	53	7,168	7,459	7,773	8,027
24	1	Madriz	2	Palacagu'ina	6	6	136	10,454	10,878	11,337	11,707
24	1	Madriz	2	San Lucas	7	7	139	7,727	8,041	8,380	8,654
24	1	Madriz	2	Las Sabanas	8	8	69	2,478	2,579	2,688	2,776
24	1	Madriz	2	San Jose' de Cusnapa	9	9	101	4,867	5,064	5,277	5,450
19	1	Esteli'	3	Pueblo Nuevo	1	1	224	18,219	18,958	19,757	20,403
19	1	Esteli'	3	Condega	2	2	396	20,396	21,224	22,120	22,842
19	1	Esteli'	3	San Juan de Limay	3	3	535	13,148	13,681	14,258	14,724
19	1	Esteli'	3	Esteli'	4	4	754	79,498	82,723	86,313	89,028
19	1	Esteli'	3	La' Trinidad	5	5	261	18,322	19,065	19,870	20,518
19	1	Esteli'	3	San Nicola's	6	6	163	5,939	6,180	6,441	6,651
22	2	Chinandega	4	El Viejo	1	1	1,308	50,200	52,645	55,056	57,417
22	2	Chinandega	4	Puerto Moraza'n	2	2	264	10,408	10,830	11,246	11,655
23	2	Chinandega	4	Somotillo	3	1	1,989	22,367	23,275	24,171	25,049
23	2	Chinandega	4	Santo Toma's del Norte	4	2	50	5,707	5,939	6,168	6,392
23	2	Chinandega	4	Cinco Pinos	5	3	79	6,437	6,698	6,955	7,238
23	2	Chinandega	4	San Pedro del Norte	6	4	60	3,398	3,536	3,672	3,805
23	2	Chinandega	4	San Francisco del Norte	7	3	121	7,915	7,300	7,581	7,856
23	2	Chinandega	4	Villanueva	8	6	781	18,154	18,891	19,619	20,331
22	2	Chinandega	4	Chinandega	9	3	647	90,329	93,994	97,615	101,158
22	2	Chinandega	4	El Realejo	10	4	97	6,181	6,432	6,680	6,922
21	2	Chinandega	4	Corinto	11	1	49	21,364	21,919	22,764	23,590
22	2	Chinandega	4	Chichigalpa	12	5	257	42,668	44,399	46,109	47,783
22	2	Chinandega	4	Posoltega	13	6	124	14,118	14,591	15,255	15,811
17	2	Leo'n	5	Le'on	1	1	820	152,949	159,155	165,286	171,295
17	2	Leo'n	5	Quezalguaque	2	2	80	8,447	8,790	9,128	9,460
17	2	Leo'n	5	Telica	3	3	406	19,391	20,696	21,496	22,276
17	2	Leo'n	5	Larreynaga	4	4	388	31,705	32,991	34,561	35,595
18	2	Leo'n	5	El Sauce	5	1	727	25,335	26,883	27,919	28,932
18	2	Leo'n	5	Achuapa	6	2	333	15,350	15,692	16,296	16,888
18	2	Leo'n	5	Santa Rosa del Penon	7	3	238	7,342	7,640	7,934	8,222
18	2	Leo'n	5	El Jicaral	8	4	434	7,351	8,170	8,485	8,793
17	2	Leo'n	5	La Paz Centro	9	5	306	26,395	27,466	28,524	29,559

Population by Municipality (Estimation 2/3)

ZONE	REGION	DEPATMENT	D-NUMBER	Municipality	STAT N-No.	ZONE N-No.	AREA(km2)	POP 90	POP 91	POP 92	POP 93
17	2	Leo'n	5	Nagarote	10	6	581	26,022	27,079	28,123	29,143
30	2	Leo'n	5	Pro.Sandino	11	1	0	0	0	0	0
12	3	Managua	6	San Francisco Libre	1	1	664	6,958	7,251	7,511	7,804
12	3	Managua	6	Tipitapa	2	2	973	66,993	69,711	72,204	75,024
31	3	Managua	6	Mateare	3	1	328	12,265	12,763	13,220	13,736
31	3	Managua	6	Villa Carlos Fonseca	4	2	581	22,844	23,771	24,621	25,583
31	3	Managua	6	San Rafael del Sur	5	3	375	34,295	35,676	36,951	38,395
11	3	Managua	6	Managua	6	1	683	868,015	903,233	935,520	972,072
31	3	Managua	6	Ticnantepe	7	4	68	14,431	15,017	15,554	16,162
9	4	Wasaya	7	La Concepcio'n	1	1	73	21,802	22,687	23,559	24,416
10	4	Wasaya	7	Rindiri	2	1	132	23,293	24,238	25,171	26,085
10	4	Wasaya	7	Wasaya	3	2	141	90,575	94,250	97,877	101,433
10	4	Wasaya	7	Tisma	4	3	108	11,131	11,583	12,029	12,466
9	4	Wasaya	7	Wasatepe	5	2	62	20,468	21,298	22,117	22,921
9	4	Wasaya	7	Handasno	6	3	13	7,268	7,562	7,852	8,138
9	4	Wasaya	7	Catarina	7	4	13	5,661	5,891	6,118	6,340
9	4	Wasaya	7	Niquinohomo	8	5	35	10,935	11,379	11,816	12,246
9	4	Wasaya	7	San Juan de Oriente	9	6	13	2,681	2,790	2,898	3,003
8	4	Carzo	8	San Marcos	1	1	108	21,503	22,375	23,235	24,080
8	4	Carzo	8	Diriamba	2	2	345	51,564	53,656	55,720	57,745
8	4	Carzo	8	Doiores	3	3	25	5,274	5,488	5,699	5,906
8	4	Carzo	8	Jinotepe	4	4	257	33,862	35,236	36,591	37,922
8	4	Carzo	8	El Rosario	5	5	11	3,788	3,942	4,094	4,242
8	4	Carzo	8	La Paz de Catazo	6	6	19	5,174	5,384	5,591	5,794
8	4	Carzo	8	Santa teresa	7	7	194	14,765	15,364	15,955	16,535
8	4	Carzo	8	La Conquista	8	8	91	5,353	5,611	5,866	6,115
4	4	Granada	9	Granada	1	1	531	81,729	85,045	88,319	91,527
4	4	Granada	9	Diria'	2	2	16	8,089	8,417	8,740	9,058
4	4	Granada	9	Diriono	3	3	42	19,879	20,586	21,482	22,263
4	4	Granada	9	Nandaimé	4	4	340	32,513	33,332	35,134	36,411
2	4	Rivas	10	Tola	1	1	474	18,549	19,332	20,045	20,773
2	4	Rivas	10	Eele'n	2	2	322	15,213	15,830	16,439	17,037
2	4	Rivas	10	Fotosi'	3	3	146	3,485	3,629	3,768	3,902
2	4	Rivas	10	Buenos Aires	4	4	55	5,054	5,259	5,462	5,669
2	4	Rivas	10	Rivas	5	5	139	31,733	32,626	34,298	35,543
2	4	Rivas	10	San Jorge	6	6	22	7,055	7,341	7,624	7,901
3	4	Rivas	10	San Juan del Sur	7	1	598	14,793	15,300	15,889	16,466
3	4	Rivas	10	Ca'rdenas	8	7	163	3,391	3,516	3,640	3,761
3	4	Rivas	10	Noyogalpa	9	8	53	3,038	3,167	3,331	3,489
3	4	Rivas	10	Altagracia	10	9	203	14,320	14,901	15,475	16,037
5	5	Boaco	11	San Jose' de los Reates	1	1	254	6,245	6,632	6,873	7,195
5	5	Boaco	11	Tenustepe	2	2	569	18,687	19,445	20,244	20,927
5	5	Boaco	11	Santa Lucia	3	3	120	7,701	8,013	8,342	8,624
5	5	Boaco	11	Boaco	4	4	1,042	24,599	26,002	27,434	28,747
5	5	Boaco	11	Canoapa	5	5	1,478	35,527	36,563	37,654	38,537
5	5	Boaco	11	Sn.Lorenzo	6	6	581	17,907	18,634	19,399	20,054
5	5	Chontales	12	Cenalapa	1	1	536	7,157	7,447	7,753	8,015
5	5	Chontales	12	Juigalpa	2	2	1,337	43,794	45,571	47,443	49,044
5	5	Chontales	12	La Libertad	3	3	761	5,251	5,474	5,698	5,891

Population by Municipality (Estimation 3/3)

ZONE	REGION	DEPARTMENT	D-NUMBER	Municipality	STAT N-No.	ZONE N-No.	AREA(km2)	POP 90	POP 91	POP 92	POP 93
5	5	Chontales	13	Santo Domingo	4	4	717	16,851	17,538	18,254	18,376
5	5	Chontales	13	San Pedro de Lo'vaze	5	5	604	15,822	16,342	16,895	17,368
5	5	Chontales	13	Santo Toma's	6	6	450	15,935	16,450	17,013	17,486
5	5	Chontales	12	Acoyapa	7	7	1,056	14,045	14,516	15,217	15,730
5	5	Chontales	13	Villa Sandino	8	8	1,168	15,325	15,822	17,578	18,170
20	6	Jinotega	13	Miwili'	1	1	3,011	24,279	25,264	26,224	27,190
20	6	Jinotega	13	Cu'a-Bocay	2	2	4,234	29,168	30,351	31,503	32,664
20	6	Jinotega	13	San Sebastia'n de Yali	3	3	311	13,473	14,020	14,552	15,088
20	6	Jinotega	13	La Concordia	4	4	122	5,397	5,616	5,830	6,044
20	6	Jinotega	13	San Rafael del Norte	5	5	395	14,620	15,213	15,791	16,372
20	6	Jinotega	13	Santa Mari'a de Fantasma	6	6	563	15,584	16,216	16,832	17,452
20	6	Jinotega	13	Jinotega	7	7	1,119	61,138	63,619	66,034	68,468
13	6	Matagalpa	14	San Isidro	1	1	150	12,819	13,339	13,846	14,356
13	6	Matagalpa	14	Se'baco	2	2	232	20,575	21,410	22,223	23,042
13	6	Matagalpa	14	Ciudad Dario	3	3	806	33,195	34,542	35,854	37,175
13	6	Matagalpa	14	Terrabona	4	4	282	10,090	10,499	10,898	11,299
14	6	Matagalpa	14	San Dionisio	5	1	152	10,630	11,061	11,481	11,904
14	6	Matagalpa	14	Esquipulas	6	2	216	12,615	13,127	13,625	14,127
14	6	Matagalpa	14	Muy Muy	7	3	375	8,224	8,558	8,882	9,210
14	6	Matagalpa	14	Matagalpa	8	4	644	84,740	88,178	91,527	94,898
14	6	Matagalpa	14	San Ramo'n	9	5	487	19,819	20,623	21,406	22,195
14	6	Matagalpa	14	El Tuva-La Dalia	10	6	462	31,796	33,086	34,342	35,608
14	6	Matagalpa	14	Rancho Grande	11	7	648	15,487	16,115	16,727	17,343
14	6	Matagalpa	14	Matigua's	12	8	1,335	28,700	29,864	30,998	32,140
14	6	Matagalpa	14	El'o Blanco	13	9	2,684	33,333	34,685	36,003	37,329
29	7	Atla'ntico Norte	15	Waspa'n	1	1	8,133	23,239	24,182	25,108	26,025
15	7	Atla'ntico Norte	15	Bonanza	2	1	2,039	7,426	7,727	8,023	8,316
15	7	Atla'ntico Norte	15	Rosita	3	2	4,418	11,650	12,123	12,588	13,047
16	7	Atla'ntico Norte	15	Puerto Cabezas	4	1	5,787	28,450	29,604	30,739	31,860
15	7	Atla'ntico Norte	15	Waslala	5	3	1,291	21,285	22,149	22,990	23,837
15	7	Atla'ntico Norte	15	Siuna	6	4	4,238	25,544	26,580	27,598	28,606
16	7	Atla'ntico Norte	15	Prinzapolka	7	2	6,253	2,935	3,054	3,171	3,287
7	8	Atla'ntico Sur	16	Paiwas	1	1	1,478	4,488	4,670	4,848	5,026
28	8	Atla'ntico Sur	16	La Cruz de El'o Grande	2	1	6,360	12,176	12,670	13,190	13,635
28	8	Atla'ntico Sur	16	Laguna de Perlas	3	2	3,876	4,697	4,988	5,090	5,261
28	8	Atla'ntico Sur	16	Kukra Hill	4	3	1,262	6,141	6,390	6,653	6,877
7	8	Atla'ntico Sur	16	El Rama	5	2	5,618	32,915	34,250	35,658	36,860
7	8	Atla'ntico Sur	16	Muelle de los Bueyes	6	3	1,391	23,420	24,370	25,370	26,227
7	8	Atla'ntico Sur	16	Nueva Guinea	7	4	2,774	43,736	45,511	47,381	48,980
27	8	Atla'ntico Sur	16	Bluefields	8	1	4,639	34,142	35,527	36,988	38,235
27	8	Atla'ntico Sur	16	Corn Island	9	2	9	5,079	5,285	5,502	5,688
1	9	Rio San Juan	17	Moritto	1	1	677	4,501	4,684	4,869	5,041
1	9	Rio San Juan	17	El Almendro	2	2	993	8,417	8,758	9,117	9,425
1	9	Rio San Juan	17	San Miguelito	3	3	923	7,628	7,937	8,251	8,542
1	9	Rio San Juan	17	San Carlos	4	4	1,462	14,621	15,214	15,816	16,374
1	9	Rio San Juan	17	El Castillo	5	5	1,656	5,042	5,247	5,454	5,646
26	9	Rio San Juan	17	San Juan del Norte	6	1	1,762	551	573	596	616
32	10	Frontera Norte	18	Honduras	1	1					
32	10	Frontera Norte	18	El Salvador	2	2					
32	10	Frontera Norte	18	Guatemala	3	3					
32	10	Frontera Norte	18	Mexico	4	4					
32	10	Frontera Norte	18	EEUU	5	5					
32	10	Frontera Norte	18	Canada	6	6					
33	11	Frontera Sur	19	Costa Rica	1	1					
33	11	Frontera Sur	19	Panama	2	2					
33	11	Frontera Sur	19	Sur America	3	3					

TOTAL

121,428 3,673,044 3,822,072 3,968,500 4,113,369

Population by Municipality (Estimation 1995-2025: 1/3)

ZONE	REGION	DEPARTMENT	D-NUMBER	Municipality	STAT N-No.	ZONE N-No.	AREA(km2)	EST1995	EST2000	EST2005	EST2010	EST2015	EST2020	EST2025
17	2	Leo'n	5	Hagarote	10	6	581	31,196	36,339	41,761	47,320	52,917	58,466	63,887
30	2	Leo'n	5	Pro.Sandino	11	1	0	0	0	0	0	0	0	0
12	3	Managua	6	San Francisco Libre	1	1	664	8,342	9,710	11,153	12,632	14,122	15,598	17,041
12	3	Managua	6	Yipitapa	2	2	973	80,193	93,334	107,192	121,400	135,707	149,889	163,741
31	3	Managua	6	Mateare	3	1	328	14,684	17,091	19,629	22,232	24,852	27,450	29,988
31	3	Managua	6	Villa Carlos Fonseca	4	2	581	27,345	31,828	36,553	41,399	46,278	51,115	55,839
31	3	Managua	6	San Rafael del Sur	5	3	375	41,040	47,765	54,857	62,127	69,449	76,706	83,795
11	3	Managua	6	Managua	6	1	683	1,039,030	1,209,300	1,388,847	1,572,924	1,758,301	1,942,041	2,121,514
31	3	Managua	6	Ticnantepe	7	4	68	17,276	20,109	23,095	26,158	29,241	32,298	35,283
9	4	Nasaya	7	La Concepcio'n	1	1	73	26,135	30,443	34,984	39,540	44,228	48,976	53,515
10	4	Nasaya	7	Nindirí	2	1	132	27,922	32,523	37,375	42,348	47,357	52,322	57,172
10	4	Nasaya	7	Nasaya	3	2	141	108,575	126,471	145,338	164,378	184,155	203,463	222,324
10	4	Nasaya	7	Tisma	4	3	108	13,344	15,545	17,864	20,243	22,637	25,011	27,330
9	4	Nasaya	7	Nasatepe	5	2	62	24,534	28,576	32,838	37,208	41,608	45,979	50,230
9	4	Nasaya	7	Nandasso	6	3	13	8,710	10,143	11,655	13,204	14,764	16,311	17,822
9	4	Nasaya	7	Catarina	7	4	13	6,787	7,906	9,086	10,296	11,514	12,721	13,901
9	4	Nasaya	7	Niquinohomo	8	5	35	13,108	15,269	17,546	19,881	22,232	24,565	26,840
9	4	Nasaya	7	San Juan de Oriente	9	6	13	3,215	3,746	4,306	4,880	5,457	6,030	6,590
8	4	Carzo	8	San Marcos	1	1	108	25,774	30,022	34,498	39,089	43,711	48,293	52,769
8	4	Carzo	8	Diriamba	2	2	345	61,810	71,997	82,736	93,746	104,834	115,924	126,551
8	4	Carzo	8	Dolores	3	3	25	6,321	7,364	8,461	9,587	10,721	11,845	12,942
8	4	Carzo	8	Jinotepe	4	4	257	40,592	47,283	54,336	61,568	68,850	76,059	83,121
8	4	Carzo	8	El Rosario	5	5	11	4,541	5,239	6,078	6,887	7,702	8,509	9,298
8	4	Carzo	8	La Paz de Carazo	6	6	19	6,202	7,224	8,301	9,406	10,517	11,620	12,696
8	4	Carzo	8	Santa teresa	7	7	194	17,699	20,617	23,691	26,845	30,019	33,167	36,241
8	4	Carzo	8	La Conquista	8	8	91	7,617	8,873	10,197	11,554	12,922	14,277	15,601
4	4	Granada	9	Granada	1	1	531	97,972	114,121	131,146	148,600	166,176	183,600	200,620
4	4	Granada	9	Diria'	2	2	16	9,695	11,292	12,975	14,701	16,439	18,162	19,845
4	4	Granada	9	Diricomo	3	3	42	23,831	27,760	31,902	36,148	40,424	44,663	48,804
4	4	Granada	9	Madaine	4	4	340	38,975	45,399	52,172	59,115	66,108	73,039	79,810
2	4	Rivas	10	Tola	1	1	474	22,237	25,902	29,756	33,728	37,718	41,572	45,536
2	4	Rivas	10	Bele'n	2	2	282	18,236	21,243	24,411	27,561	30,932	34,176	37,344
2	4	Rivas	10	Potosí'	3	2	146	10,171	11,844	13,613	15,425	17,249	19,057	20,823
2	4	Rivas	10	Buenos Aires	4	4	55	6,059	7,058	8,111	9,191	10,278	11,357	12,409
2	4	Rivas	10	Rivas	5	5	139	38,047	44,318	50,930	57,708	64,535	71,301	77,911
2	4	Rivas	10	San Jorge	6	6	22	8,458	9,852	11,323	12,829	14,348	15,852	17,322
3	4	Rivas	10	San Juan del Sur	7	1	598	17,626	20,532	23,595	26,756	29,898	35,033	36,095
2	4	Rivas	10	Ca'rdenas	8	7	163	2,705	4,315	4,958	5,617	6,281	6,939	7,582
2	4	Rivas	10	Moyogalpa	9	8	53	10,906	12,704	14,599	16,543	18,459	20,440	22,334
2	4	Rivas	10	Altagracia	10	9	203	17,167	19,997	22,980	26,029	29,119	32,173	35,155
5	5	Boaco	11	San Jose' de los Remates	1	1	254	7,615	8,877	10,205	11,568	12,940	14,301	15,630
5	5	Boaco	11	Tenustepe	2	2	669	22,430	26,148	30,065	34,092	38,126	42,137	46,053
5	5	Boaco	11	Santa Lucía	3	3	120	9,243	10,775	12,389	14,044	15,710	17,362	18,976
5	5	Boaco	11	Boaco	4	4	1,042	41,533	48,417	55,572	63,111	70,691	78,027	85,201
5	5	Boaco	11	Cazoapa	5	5	1,478	30,542	35,719	41,071	46,557	52,082	57,559	62,511
5	5	Boaco	11	San Lorenzo	6	5	681	21,495	25,858	28,912	32,662	36,538	40,381	44,135
5	5	Chontales	12	Comaiapa	1	1	536	8,591	10,015	11,515	13,054	14,603	16,139	17,639
5	5	Chontales	12	Juigalpa	2	2	1,037	52,568	61,280	70,462	79,875	89,355	98,752	107,927
5	5	Chontales	12	La Libertad	3	3	761	6,313	7,359	8,460	9,589	10,727	11,854	12,955

Population by Municipality (Estimation 1995-2025: 2/3)

ZONE	REGION	DEPARTMENT	D-NUMBER	Municipality	STAT N-No.	ZONE N-No.	AREA(km2)	EST1995	EST2000	EST2005	EST2010	EST2015	EST2020	EST2025
25	1	Nueva Segovia	1	Santa Maria	1	1	168	3,353	4,509	5,320	6,008	6,721	7,428	8,112
25	1	Nueva Segovia	1	Macuelizo	2	2	250	4,068	4,742	5,454	6,193	6,918	7,645	8,357
25	1	Nueva Segovia	1	Dipiito	3	3	95	4,459	5,199	5,979	6,779	7,584	8,382	9,182
25	1	Nueva Segovia	1	Ucotal	4	4	104	30,871	35,998	41,402	46,941	52,520	58,049	63,452
25	1	Nueva Segovia	1	Nonzonie	5	5	242	4,695	5,477	6,299	7,143	7,991	8,834	9,656
25	1	Nueva Segovia	1	San Fernando	6	6	269	5,091	7,102	8,158	9,261	10,362	11,453	12,513
25	1	Nueva Segovia	1	Ciudad Antigua	7	7	154	2,830	3,301	3,797	4,307	4,819	5,327	5,822
25	1	Nueva Segovia	1	El Jicaró(Ciudad Sandi'no)	8	8	404	18,402	21,459	24,681	27,984	31,313	34,628	37,830
25	1	Nueva Segovia	1	Jalapa	9	9	629	35,871	41,930	48,112	54,550	61,035	67,462	73,743
25	1	Nueva Segovia	1	Murra	10	10	479	7,255	8,460	9,729	11,030	12,340	13,639	14,903
25	1	Nueva Segovia	1	Quijali'	11	11	339	17,501	20,408	23,473	26,613	29,777	32,913	35,977
24	1	Madriz	2	Sonoto	1	1	474	32,320	37,688	43,245	49,145	54,986	60,777	66,434
24	1	Madriz	2	Tecolgalpa	2	2	137	9,227	10,760	12,375	14,030	15,698	17,351	18,966
24	1	Madriz	2	Telpaneca	3	3	272	11,372	13,262	15,252	17,294	19,348	21,386	23,376
24	1	Madriz	2	San Juan del Rio's Coco	4	4	221	15,529	18,107	20,826	23,612	26,418	29,200	31,918
24	1	Madriz	2	Yalagu'ina	5	5	53	8,609	10,037	11,544	13,088	14,643	16,185	17,691
24	1	Madriz	2	Paicagu'ina	6	6	136	12,555	14,640	16,838	19,091	21,360	23,639	25,806
24	1	Madriz	2	San Lucas	7	7	139	9,282	10,824	12,450	14,116	15,795	17,458	19,084
24	1	Madriz	2	Las Sabanas	8	8	69	2,977	3,474	3,996	4,532	5,071	5,606	6,128
24	1	Madriz	2	San Jose' de Cusmapa	9	9	101	5,844	6,814	7,836	8,884	9,940	10,986	12,008
19	1	Esteli'	3	Pueblo Nuevo	1	1	224	21,881	25,516	29,345	33,272	37,225	41,146	44,975
19	1	Esteli'	3	Condega	2	2	398	24,498	28,569	32,858	37,256	41,685	45,076	48,366
19	1	Esteli'	3	San Juan de Linay	3	3	535	15,791	18,413	21,178	24,011	26,865	29,693	32,457
19	1	Esteli'	3	Esteli'	4	4	754	95,480	111,340	128,054	145,188	162,444	179,550	196,263
19	1	Esteli'	3	La' Trinidad	5	5	261	22,005	25,660	29,511	33,461	37,437	41,380	45,231
19	1	Esteli'	3	San Nicola's	6	6	163	7,134	8,318	9,567	10,847	12,137	13,415	14,664
22	2	Chinandega	4	El Viejo	1	1	1,708	72,165	84,061	96,601	109,459	122,406	135,240	147,778
22	2	Chinandega	4	Puerto Moraza'n	2	2	264	12,475	14,530	16,696	18,917	21,134	23,371	25,537
23	2	Chinandega	4	Somotillo	3	1	1,089	26,813	31,233	35,893	40,671	45,482	50,251	54,910
23	2	Chinandega	4	Santo Tona's del Norte	4	2	50	6,843	7,972	9,162	10,382	11,611	12,829	14,019
23	2	Chinandega	4	Cinco Pinos	5	3	79	7,715	8,985	10,325	11,698	13,081	14,451	15,790
23	2	Chinandega	4	San Pedro del Norte	6	4	60	4,073	4,743	5,451	6,176	6,906	7,630	8,337
23	2	Chinandega	4	San Francisco del Norte	7	5	121	8,409	9,795	11,256	12,755	14,263	15,759	17,220
23	2	Chinandega	4	Villanueva	8	6	781	21,763	25,352	29,134	33,013	36,918	40,790	44,572
22	2	Chinandega	4	Chinandega	9	3	647	108,283	126,133	144,950	164,242	183,569	202,927	221,740
22	2	Chinandega	4	El Realejo	10	4	97	7,410	8,631	9,919	11,239	12,569	13,887	15,174
21	2	Chinandega	4	Corinto	11	1	49	25,252	29,416	33,805	38,306	42,837	47,330	51,718
22	2	Chinandega	4	Chichigalpa	12	5	257	51,148	59,580	68,467	77,590	86,755	95,352	104,737
22	2	Chinandega	4	Posoltega	13	6	124	16,924	19,714	22,655	25,671	28,707	31,718	34,658
17	2	Leo'n	5	Le'on	1	1	320	183,349	213,573	245,434	279,100	310,994	343,603	375,456
17	2	Leo'n	5	Quezalguaque	2	2	80	10,126	11,796	13,555	15,360	17,176	18,978	20,737
17	2	Leo'n	5	Telica	3	3	400	23,846	27,777	31,922	36,170	40,450	44,691	48,835
17	2	Leo'n	5	Tarreynaga	4	4	398	38,005	44,258	50,871	57,640	64,457	71,215	77,816
18	2	Leo'a	5	El Sauce	5	1	727	30,970	36,075	41,457	46,974	52,531	58,038	63,415
13	2	Leo'n	5	Achuapa	6	2	353	18,077	21,057	24,199	27,419	30,663	33,875	37,018
18	2	Leo'a	5	Santa Rosa del Peno'n	7	3	238	9,801	10,251	11,780	13,348	14,926	16,491	18,020
18	2	Leo'n	5	El Jicaral	8	4	434	9,413	10,956	12,602	14,281	15,970	17,646	19,282
17	2	Leo'n	5	La Paz Centro	9	5	306	31,641	36,357	42,355	47,991	53,668	59,294	64,791

Population by Municipality (Estimation 1995-2025: 3/3)

ZONE	REGION	DEPARTMENT	D-NUMBER	Municipality	STAT N-No.	ZONE N-No.	AREA(km2)	EST1995	EST2000	EST2005	EST2010	EST2015	EST2020	EST2025	
5	5	Chontales	12	Santo Domingo	4	4	717	20,225	23,575	27,105	30,725	34,370	37,984	41,514	
5	5	Chontales	12	San Pedro de Lo'vago	5	5	604	15,397	17,947	20,635	23,391	26,165	28,917	31,605	
5	5	Chontales	12	Santo Toma's	6	6	450	15,528	18,101	20,814	23,595	26,395	29,171	31,883	
5	5	Chontales	12	Acoyapa	7	7	1,055	16,861	19,655	22,601	25,620	28,662	31,676	34,621	
5	5	Chontales	12	Villa Sordino	8	8	1,168	19,477	22,705	26,107	29,596	33,168	36,590	39,992	
20	6	Jinotega	13	Miwili'	1	1	3,011	29,097	33,888	38,940	44,119	49,335	54,504	59,555	
20	6	Jinotega	13	Cu'a-Bocay	2	2	4,234	34,954	40,708	46,775	52,994	59,257	65,466	71,520	
20	6	Jinotega	13	San Sebastia'n de Yali	3	3	311	16,146	18,804	21,606	24,480	27,372	30,241	33,042	
20	6	Jinotega	13	La Concordia	4	4	122	6,468	7,524	8,657	9,809	10,968	12,118	13,240	
20	6	Jinotega	13	San Rafael del Norte	5	5	395	17,520	20,404	23,444	26,562	29,701	32,812	35,852	
20	6	Jinotega	13	Santa Mari'a de Fantasma	6	6	563	18,676	21,751	24,992	28,316	31,662	34,980	38,220	
20	6	Jinotega	13	Jinotega	7	7	1,119	73,270	85,333	98,053	111,092	124,224	137,240	149,956	
13	6	Matagalpa	14	San Isidro	1	1	150	15,363	17,893	20,560	23,295	26,048	28,778	31,445	
13	6	Matagalpa	14	Se'bacc	2	2	282	24,658	28,718	32,999	37,388	41,807	46,188	50,468	
13	6	Matagalpa	14	Ciudad Jario	3	3	806	39,783	46,334	53,240	60,321	67,451	74,519	81,423	
13	6	Matagalpa	14	Terrabona	4	4	282	12,092	14,082	16,180	18,331	20,497	22,645	24,742	
14	6	Matagalpa	14	San Dienisio	5	1	152	12,739	14,826	17,047	19,313	21,596	23,858	26,068	
14	6	Matagalpa	14	Esquipulas	6	2	216	15,117	17,605	20,229	22,919	25,627	28,312	30,935	
14	6	Matagalpa	14	Muy Muy	7	3	375	9,855	11,478	13,188	14,942	16,708	18,458	20,168	
14	6	Matagalpa	14	Matagalpa	8	4	644	101,553	118,272	135,900	153,972	172,171	190,210	207,833	
14	6	Matagalpa	14	San Ramo'n	9	5	487	23,752	27,662	31,785	36,012	40,269	44,488	48,610	
14	6	Matagalpa	14	El Yuna-La Dalia	10	6	462	38,105	44,379	50,993	57,775	64,604	71,373	77,986	
14	6	Matagalpa	14	Rancho Grande	11	7	648	18,559	21,614	24,835	28,137	31,462	34,758	37,978	
14	6	Matagalpa	14	Matigua's	12	8	1,335	34,393	40,055	46,024	52,145	58,307	64,417	70,384	
14	6	Matagalpa	14	Ri'o Blaaco	13	9	2,684	39,947	46,525	53,459	60,569	67,728	74,825	81,758	
29	7	Atla'ntico Norte	15	Waspa'n	1	1	8,133	23,752	27,855	32,444	37,283	42,243	47,238	52,190	57,027
15	7	Atla'ntico Norte	15	Bananera	2	1	2,039	8,900	10,367	11,912	13,497	15,093	16,675	18,220	
15	7	Atla'ntico Norte	15	Rosita	3	2	4,418	13,965	16,267	18,693	21,181	23,686	26,169	28,595	
16	7	Atla'ntico Norte	15	Puerto Cabezas	4	1	5,787	34,100	39,719	45,641	51,714	57,829	63,891	69,811	
15	7	Atla'ntico Norte	15	Wasiala	5	3	1,291	25,509	29,709	34,137	38,678	43,249	47,782	52,208	
15	7	Atla'ntico Norte	15	Siona	6	4	4,238	30,617	35,661	40,978	46,431	51,921	57,363	62,679	
16	7	Atla'ntico Norte	15	Prinzapolka	7	2	6,253	3,518	4,098	4,709	5,336	5,967	6,593	7,204	
7	8	Atla'ntico Sur	16	Paiwas	1	1	1,478	5,379	6,264	7,198	8,156	9,120	10,076	11,009	
28	8	Atla'ntico Sur	16	La Cruz de Ri'o Grande	2	1	6,360	14,615	17,035	19,587	22,202	24,837	27,448	30,000	
28	8	Atla'ntico Sur	16	Laguna de Perlas	3	2	3,876	5,640	6,577	7,563	8,575	9,534	10,604	11,591	
28	8	Atla'ntico Sur	16	Nukra Hill	4	3	1,262	7,371	8,593	9,880	11,201	12,529	13,848	15,135	
7	8	Atla'ntico Sur	16	El Eana	5	2	5,618	39,509	46,055	52,956	60,030	67,154	74,216	81,115	
7	8	Atla'ntico Sur	16	Muelle de los Baueyes	6	3	1,391	28,111	32,768	37,677	42,710	47,777	52,802	57,709	
7	8	Atla'ntico Sur	16	Nueva Guinea	7	4	2,774	52,501	61,202	70,374	79,776	89,345	98,631	107,802	
27	8	Atla'ntico Sur	16	Bluefields	8	1	4,639	40,983	47,776	54,935	62,274	69,665	76,993	84,151	
27	8	Atla'ntico Sur	16	Corn Island	9	2	9	6,097	7,107	8,172	9,264	10,364	11,454	12,518	
1	9	Rio San Juan	17	Moritto	1	1	677	5,400	6,291	7,232	8,196	9,168	10,130	11,071	
1	9	Rio San Juan	17	El Almendro	2	2	993	10,101	11,774	13,536	15,344	17,163	18,968	20,736	
1	9	Rio San Juan	17	San Miguelito	3	2	923	9,148	10,659	12,251	13,884	15,528	17,158	18,750	
1	9	Rio San Juan	17	San Carlos	4	4	1,462	17,537	20,434	23,459	26,619	29,773	32,898	35,952	
1	9	Rio San Juan	17	El Castillo	5	5	1,655	6,047	7,044	8,097	9,175	10,262	11,338	12,391	
26	9	Rio San Juan	17	San Juan del Norte	6	1	1,762	659	767	881	997	1,114	1,231	1,344	
32	10	Frontera Norte	18	Honduras	1	1									
32	10	Frontera Norte	18	El Salvador	2	2									
32	10	Frontera Norte	18	Guatemala	3	3									
32	10	Frontera Norte	18	Mexico	4	4									
32	10	Frontera Norte	18	EEUU	5	5									
32	10	Frontera Norte	18	Canada	6	6									
33	11	Frontera Sur	19	Costa Rica	1	1									
33	11	Frontera Sur	19	Panamá	2	2									
33	11	Frontera Sur	19	Sar America	3	3									
TOTAL								121,428	140,636	162,996	187,714	214,755	243,271	272,823	303,442

Anexos 8-3 Datos de Empleo

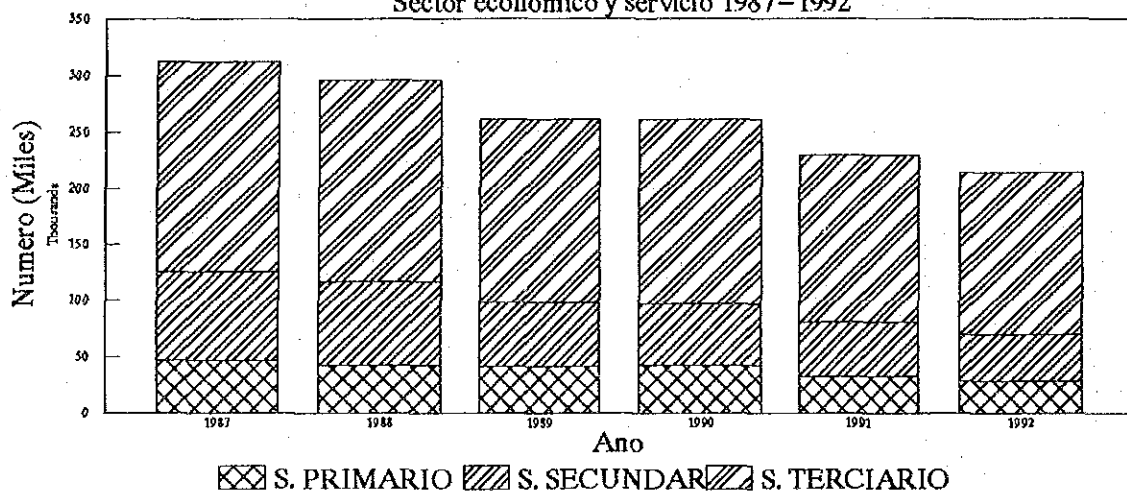
NUMERO DE EMPLEADOS ASEGURADOS

ACTIVIDAD ECONOMICA AÑO 1987-1992	1987	1988	1989	1990	1991	1992
Total	311,873	295,936	261,209	261,439	228,930	214,675
SECTOR PRIMARIO	46,995	42,177	41,516	42,629	33,293	28,042
Agricultura, Silvicultura y Pesca	46,995	42,177	41,516	42,629	33,293	28,042
SECTOR SECUNDARIO	78,573	74,416	56,478	54,244	47,328	41,282
Industria Manufacturera	61,837	56,136	45,279	43,402	36,695	33,436
Construccion	14,534	15,873	9,460	9,353	9,219	6,578
Mineria y Cantera	2,202	2,407	1,739	1,489	1,414	1,268
SECTOR TERCIARIO	186,305	179,343	163,215	164,566	148,309	145,351
Comercio	26,019	27,786	22,789	21,608	21,133	21,509
Transporte	17,665	12,722	12,208	11,185	9,826	8,832
Electricidad, gas y agua	7,949	6,468	5,339	6,033	5,809	6,095
Establecimientos financieros	17,108	16,313	16,029	15,851	14,221	11,234
Servicios comunales	114,796	113,574	104,591	107,588	95,718	96,308
Actividades no especificadas	2,768	2,480	2,259	2,300	1,602	1,373

FUENTE: Instituto Nacional de Estadísticas y Censos, basados en datos suministrados por el Instituto Nicaraguense de Seguridad Social y Bienestar (INSSBI)

Seguros pagados - miembros

Sector económico y servicio 1987-1992



2-4-2 PAGO DE SEGUROS - MIEMBROS POR ZONAS DE SERVICIO Y SECTOR ECONOMICO 1991

Sector Economico, Año 1991	TOTAL	MANAGUA	CHINANDEGA	LEON	MASAYA	GRANADA	CARAZO	RIVAS	ESTELI
Total	228 930	117,663	24,997	13,221	5,528	8,941	7,096	4,872	6,523
Sector Primario	33,293	7,686	9,454	2,519	890	1,374	1,596	889	1,210
Agricultura y Ganadería	33,293	7,686	9,454	2,519	890	1,374	1,596	889	1,210
Sector Secundario	47,328	28,599	3,580	2,307	1,204	3,362	349	1,509	1,907
Industria Manufacturera	36,695	22,148	3,482	1,607	1,177	2,894	314	1,447	601
Construcción	9,219	6,138	91	641	27	468	24	62	406
Minería y Canteras	1,414	313	7	59	11	11	11	62	62
Sector Terciario	148,309	81,378	11,963	8,395	3,434	4,205	5,151	2,474	4,306
Comercio altas/bajas escalas, Restaurantes - Hoteles	21,133	15,104	792	1,064	468	836	364	185	452
Transporte, Almacenamiento y Comunicación	9,826	6,308	2,238	422	9	38	7	397	36
Energía, Gas y Agua	5,809	5,328	2	34	10	19	9	32	34
Establecimientos Financieros	14,221	9,901	577	729	324	347	181	177	256
Servicios comunales, sociales y personales	95,718	44,533	8,268	5,226	2,623	2,955	4,433	1,682	3,522
Actividades no especificadas	1,602	204	86	920	157	10	157	1	6

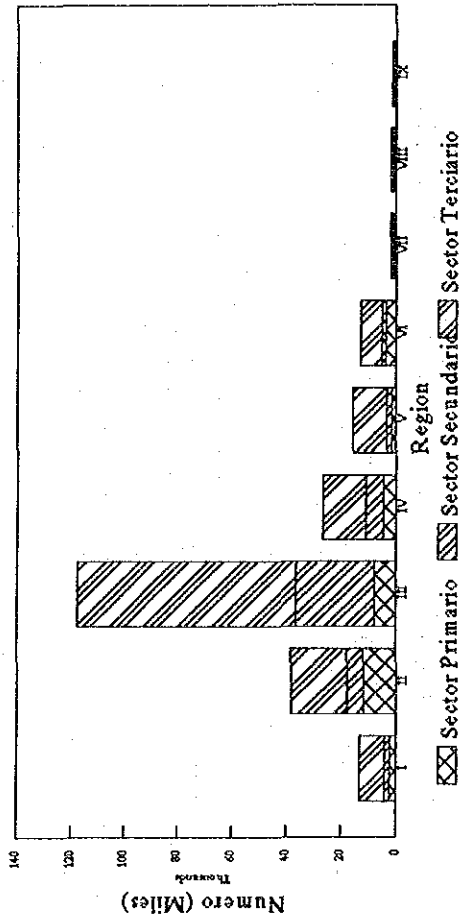
Sector Economico, Año 1991	NUEVA SEGOVIA	MADRIZ	RIO SAN JUAN	MATAGALPA	JINOTEGA	BOACO	CHONTALES	ZELAYA NORTE	ZELAYA SUR
Total	3,702	3,016	1,933	8,069	4,779	5,280	10,321	1,762	1,827
Sector Primario	963	290	148	2,285	1,562	382	1,207	55	783
Agricultura y Ganadería	963	290	148	2,285	1,562	382	1,207	55	783
Sector Secundario	622	42	422	1,117	142	74	1,695	968	332
Industria Manufacturera	607	42	345	577	98	13	1,008	5	332
Construcción	15	77	77	540	44	58	425	265	698
Minería y Canteras							264		
Sector Terciario	2,117	2,684	763	4,667	3,075	4,827	7,419	739	742
Comercio altas/bajas escalas, Restaurantes - Hoteles	169	61	15	707	103	158	430	82	143
Transporte, Almacenamiento y Comunicación	40	10	8	13	56	1	183	6	72
Energía, Gas y Agua	8	87	67	131	61	7	100	13	3
Establecimientos Financieros	167	87	673	522	261	185	260	76	104
Servicios comunales, sociales y personales	1,715	2,516	673	3,292	2,491	4,472	6,429	562	326
Actividades no especificadas	18	10	2	2	103	4	17	64	64

Nota: Se incluyen las extensiones de municipios
Fuente: Instituto Nicaraguense de Estadísticas y Censos, basados en datos suministrados por el Instituto Nicaraguense de Seguridad y Bienestar Social

2-4-2 PAGO DE SEGUROS - MIEMBROS POR ZONAS SERV. Y SECT. ECON. POR REGION 1991

Sector Económico, Año 1991	TOTAL	I	II	III	IV	V	VI	VII	VIII	IX
Region										
Total	228930	13241	38218	117663	26437	15601	12848	1762	1827	1333
Sector Primario	38293	2463	11973	7686	4743	1593	3847	55	783	148
Agricultura y Ganadería	33293	2463	11973	7686	4743	1589	3847	55	783	148
Sector Secundario	47328	1571	5887	28599	6424	1768	1253	368	332	422
Industria Manufacturera	36695	1250	5089	22148	5832	1019	675	5	332	345
Construcción	9219	421	792	6138	519	483	584	265	0	77
Minería y Cantera	1414	0	66	313	78	264	0	698	0	0
Sector Terciario	148309	9107	20358	81378	15264	12246	7742	739	712	763
Comercio al por mayor, restaurantes, hoteles	21133	682	1856	15104	1853	588	810	82	143	15
Transporte, Almacenamiento y Comunicación	9826	76	2660	6308	451	184	69	6	72	0
Energía, Gas y Agua	5803	52	36	5328	70	107	192	13	3	8
Establecimientos Financieros	14221	510	1306	9901	1029	445	783	76	104	67
Servicios comunales, sociales y personales	95718	7753	13494	44533	11693	10901	5783	562	326	673
Actividades no especificadas	1602	34	1006	204	168	21	105	0	64	0

Nota: Se incluyen las extensiones de municipios
Fuente: Instituto Nicaraguense de Estadísticas y Censos, basados en datos
suministrados por el Instituto Nicaraguense de Seguridad y Bienestar Social



2-4-4 SALARIO SEMANAL PROMEDIO DE EMPLEADOS ASEGURADOS AL INSSBI POR ZONAS
ZONAS DE SERVICIO Y SECTOR ECONOMICO

SECTOR ECONOMICO, AÑO 1991	TOTAL	MANAGUA	CHINANDEGA	LEON	MASAYA	GRANADA	CARAZO	RIVAS	ESTELI
Total	168.53	206.33	167.51	142.11	121.99	122.58	104.23	114.82	111.82
Sector Primario	120.10	159.40	166.82	93.15	50.05	52.14	64.96	92.90	92.61
Agricultura y Ganadería	120.10	159.40	166.82	93.15	50.05	52.14	64.96	92.90	92.61
Sector Secundario	539.79	763.65	468.03	457.60	346.11	262.93	262.04	242.98	219.98
Industria Manufacturera	210.17	245.49	172.49	198.00	222.53	148.41	109.49	125.79	115.78
Construcción	173.05	196.67	128.28	158.99	123.58	114.52	74.66	77.89	104.20
Minería y Canteras	156.57	321.49	167.26	100.61	77.89	77.89	77.89	117.19	104.20
Sector Terciario	1239.58	1392.47	845.07	1121.12	485.81	699.01	658.86	708.54	734.61
Comercio altas/bajas escalas, Restaurantes - Hoteles	228.97	256.08	158.56	154.78	111.84	157.83	148.80	136.83	139.98
Transporte, Almacenamiento y Comunicación	221.71	222.60	243.30	234.32	66.89	91.45	62.63	140.66	109.87
Energía, Gas y Agua	291.82	308.87	60.05	277.56	41.13	104.33	68.03	114.98	114.33
Establecimientos Financieros	229.67	255.40	176.98	176.98	168.06	161.29	175.34	176.02	164.89
Servicios comunales, sociales y personales	135.36	153.16	147.47	130.23	97.99	117.50	112.24	101.96	111.17
Actividades no especificadas	134.25	196.36	58.70	147.84	66.61	91.82	91.82	38.09	94.37

SECTOR ECONOMICO, AÑO 1991	NUEVA SEGOVIA	MADRIZ	RIO SAN JUAN	MATAGALPA	JNOTEGA	BOACO	CHONTALES	ZELAYA NORTE	ZELAYA SUR
Total	89.98	117.10	118.60	95.85	90.31	114.86	114.29	119.32	215.30
Sector Primario	49.29	43.35	11.85	37.25	36.36	36.94	54.15	48.74	331.90
Agricultura y Ganadería	49.29	43.35	11.85	37.25	36.36	36.94	54.15	48.74	331.90
Sector Secundario	247.78	54.80	367.47	211.49	347.53	372.90	342.81	385.57	82.25
Industria Manufacturera	81.17	54.80	116.88	106.55	255.59	116.14	167.46	118.12	82.25
Construcción	166.61	54.80	250.59	104.94	91.94	256.76	93.22	147.13	82.25
Minería y Canteras									
Sector Terciario	611.94	646.56	443.20	710.09	607.86	706.47	740.04	714.28	833.35
Comercio altas/bajas escalas, Restaurantes - Hoteles	173.84	57.19	85.01	175.76	109.15	176.09	155.54	67.94	131.79
Transporte, Almacenamiento y Comunicación	70.81			72.25	150.90	40.75	185.44	264.49	220.02
Energía, Gas y Agua	73.55	201.90	34.92	142.83	23.07	116.86	67.23	118.12	13.81
Establecimientos Financieros	166.03	173.34	201.97	166.43	172.14	165.84	164.53	150.02	199.88
Servicios comunales, sociales y personales	100.79	125.93	121.30	103.05	110.42	115.43	114.05	113.71	127.90
Actividades no especificadas	26.92	88.20	49.77	41.98	41.98	91.50	53.25	139.95	139.95

Nota: Se incluyen las extensiones de municipios

Fuente: Instituto Nicaragüense de Estadísticas y Censos, basados en datos suministrados por el Instituto Nicaragüense de Seguridad y Bienestar Social

POBLACION ECONOMICAMENTE ACTIVA OCUPADA SEGUN ACTIVIDAD ECONOMICA
(MILES)

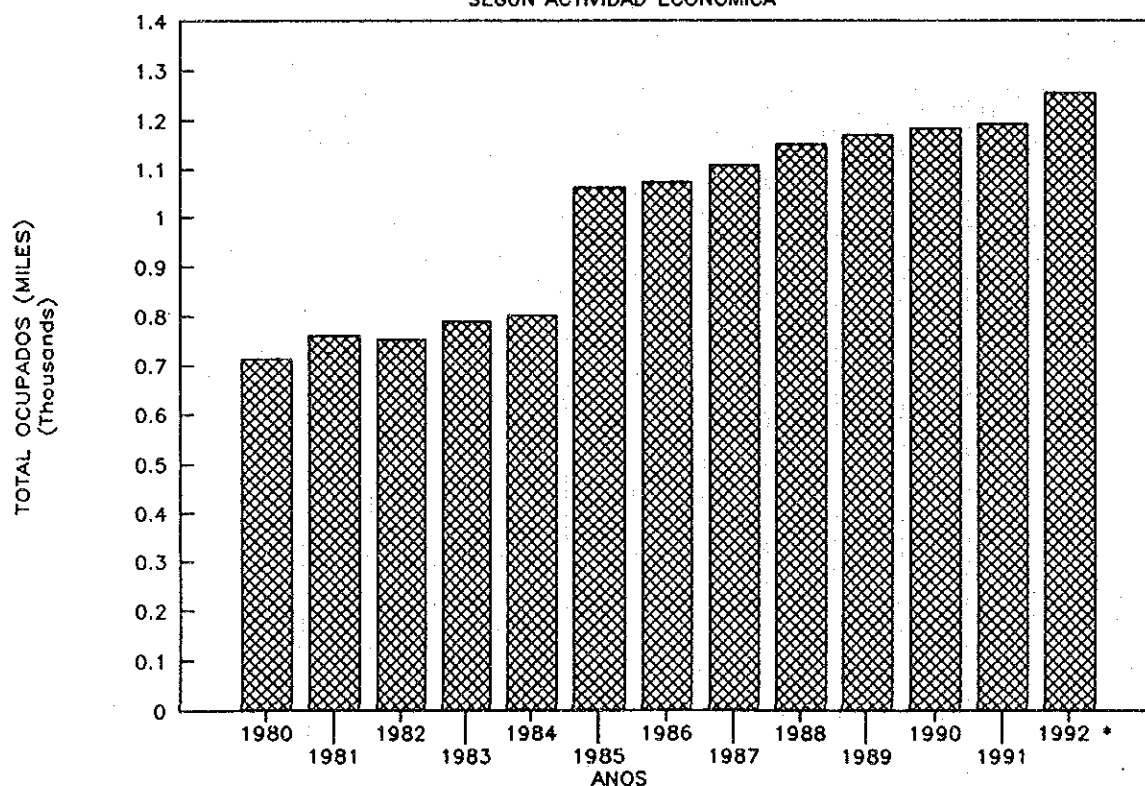
ACTIVIDAD ECONOMICA	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 *
Agricultura, Silvicultura, Casa y pesca	275.5	295.5	281.4	301.6	304.1	375.5	373.0	382.6	385.1	387.5	400.1	415.4	453.6
Industria Manufacturera	97.0	99.7	85.8	89.7	89.9	162.5	166.0	169.8	178.0	188.7	188.7	188.2	192.0
Explotacion de Minas y Canteras	5.2	4.9	3.5	3.9	3.0	8.4	8.6	8.8	9.0	9.6	9.6	9.0	9.0
Electricidad, gas y agua	5.6	5.9	6.4	6.6	6.7	9.3	9.8	10.0	10.6	10.3	10.3	10.3	10.7
Construccion	14.5	15.9	14.0	15.2	15.6	35.3	36.1	36.9	37.9	31.2	31.2	30.2	39.3
Comercio	110.0	117.3	102.1	103.1	101.0	155.5	158.8	165.8	173.4	182.3	182.3	195.5	203.7
Transporte, Almacenamiento y Comunicaciones	24.0	25.6	27.7	28.2	27.2	36.8	37.7	38.5	41.9	42.6	42.6	42.6	44.4
Establecimiento financiero y seguros	7.9	8.5	8.8	9.1	13.9	22.1	22.6	23.0	25.2	24.7	24.7	24.7	24.7
Servicios Comunales y Sociales	126.1	132.7	164.4	166.9	165.4	179.3	183.1	193.4	214.8	221.6	221.6	182.7	186.5
Gobierno Central	47.5	54.2	58.3	64.8	74.8	76.0	77.0	78.0	75.5	71.3	72.3	93.5	91.1
TOTAL OCUPADOS	713.3	760.2	752.4	789.1	801.6	1,060.7	1,072.7	1,106.8	1,151.4	1,169.8	1,183.4	1,192.1	1,255.0

* PRELIMINAR

FUENTE: SPP - DGNV (1980-1984) y MITRAB (1985-1992)

POBLACION ECONOMICAMENTE ACTIVA

SEGUN ACTIVIDAD ECONOMICA



Anexo 8-4 Datos del Parque Vehicular

PARQUE AUTOMOTOR POR AÑO DE LA CIUDAD DE MANAGUA

TIPO	ANO 86	ANO 87	ANO 88	ANO 89	ANO 90	ANO 91	ANO 92	ANO 93
AUTOMOVIL	12,234	8,157	4,742	3,270	504	5,942	8,877	2,249
JEEP	2,611	3,248	1,778	1,178	1,790	1,658	1,465	383
MICROBUS	285	517	173	256	227	372	274	81
AUTOBUS	393	644	285	41	286	652	748	233
MOTO	22	7,293	3,328	2,713	3,103	3,748	1,370	715
CAMIONETA	5,703	6,619	4,183	3,538	4,953	8,295	7,298	1,885
FURGONETA	79	572	129	46	76	207	206	49
CAMION	1,690	3,878	2,079	2,167	1,757	2,478	2,058	541
CABEZAL	93	278	142	93	112	230	182	55
REMOLQUE	102	136	66	203	149	177	137	71
TRACTOR	735	1,086	920	698	247	313	112	52
TOTAL	23,947	32,428	17,825	14,203	13,204	24,072	22,727	6,314

NOTA: Para el año 1993 se tomaron en cuenta desde Enero hasta Abril.

