

Appendix A: Data from Italy

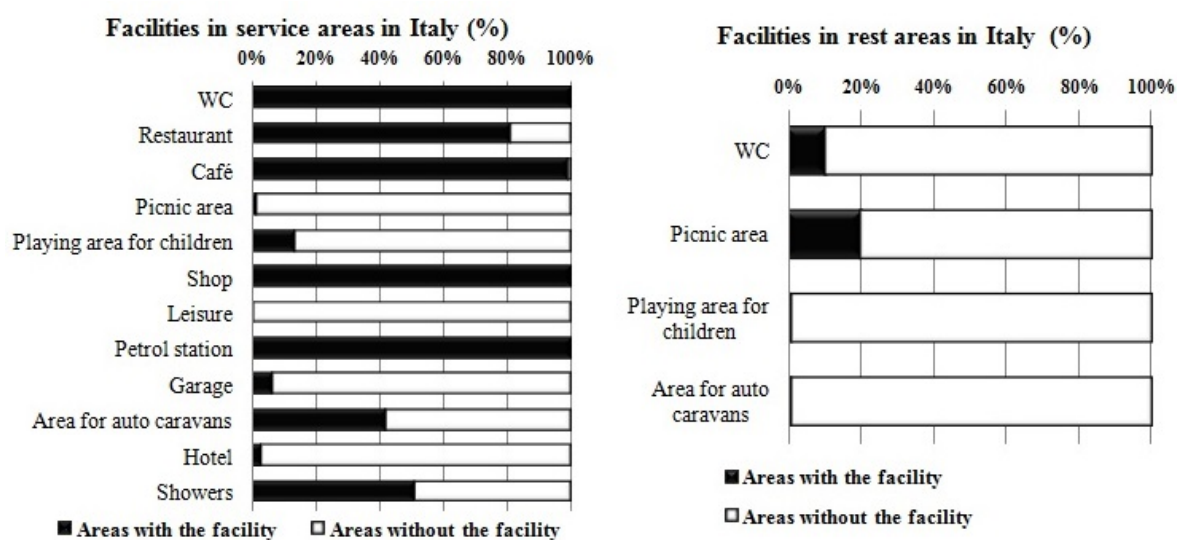
Table A.1. List of toll motorways in Italy, their length and the average, the maximum and the minimum distance between areas and service areas of each motorway (km).

Code	Itinerary	Length (km)	Service areas			Areas (Rest & Service)		
			Average distance	Minimum distance	Maximum distance	Average distance	Minimum distance	Maximum distance
A-1	Milano - Napoli	754	31.42	14.3	49.6	19.33	3.7	49.6
A-1	Napoli - Milano	754	30.16	13.2	49.6	22.18	1.6	49.6
A-3	Napoli - Reggio Calabria	494.9	35.35	12.9	73	30.93	5	73
A-3	Reggio Calabria - Napoli	494.9	38.07	12.9	73	32.99	5	73
A-4	Torino - Trieste	517	25.85	3.7	55.9	24.62	3.7	55.9
A-4	Trieste - Torino	517	24.62	2.6	58.7	23.5	2.6	58.7
A-5	Torino - Aosta	140	28	2.5	45.8	11.67	2.5	28.5
A-5	Aosta - Torino	140	35	28.7	45.8	23.33	4	45.8
A-6	Torino - Savona	124.3	17.76	10.8	21.3	17.76	10.8	21.3
A-6	Savona - Torino	124.3	17.76	10.8	23.3	17.76	10.8	23.3
A-7	Milano - Genoa	135.5	22.58	12.2	33.6	22.58	12.2	33.6
A-7	Genoa - Milano	135.5	19.36	2.3	33.6	19.36	2.3	33.6
A-8	Milano - Varese	43.6	14.53	2.9	33.1	14.53	2.9	33.1
A-8	Varese - Milano	43.6	14.53	2.9	33.1	14.53	2.9	33.1
A-10	Genoa - Ventimiglia	158.1	17.57	4.7	30.5	13.18	2	25.7
A-10	Ventimiglia - Genoa	158.1	17.57	6.3	26.3	12.16	1.3	23.2
A-12	Genoa - Rosignano Marittimo	210	26.25	14	34.7	19.09	2	34.7
A-12	Rosignano Marittimo - Genoa	210	26.25	10	36.5	21	1.3	36.5
A-13	Bologna - Padoa	113	22.6	11.7	32.9	22.6	11.7	32.9
A-13	Padoa - Bologna	113	22.6	11.7	32.9	22.6	11.7	32.9
A-14	Bologna - Taranto	756.4	28.01	2.3	58.9	21.61	2.3	45.17
A-14	Taranto - Bologan	756.4	28.01	2.3	58.78	21.61	2.3	48.73
A-15	Parma - La Spezia	110	22	11	39.6	22	11	39.6
A-15	La Spezia - Parma	110	18.33	3.9	39.6	18.33	3.9	39.6
A-16	Napoli - Casona	178.3	25.47	4.5	39.7	25.47	4.5	39.7
A-16	Casona - Napoli	178.3	29.72	4.5	46.6	29.72	4.5	46.6
A-21	Torino - Brescia	238.3	29.79	7.9	43.2	29.79	7.9	43.2
A-21	Brescia - Torino	238.3	34.04	7.9	64.3	34.04	7.9	64.3
A-22	Brennero - Modena	315	26.25	6.5	41	26.25	6.5	41
A-22	Modena - Brennero	315	26.25	6.5	41	26.25	6.5	41
A-23	Palmanova - Tarvisio	119.9	29.98	16	49.8	23.98	0.8	59.8
A-23	Tarvisio - Palmanova	119.9	29.98	16	52.4	23.98	1.6	52.4
A-24	Roma - Teramo	158	39.5	10.5	58.9	26.33	7.7	51.4
A-24	Teramo - Roma	158	39.5	10.5	58.9	26.33	7.7	51.4
A-25	Pescara - Torano	114	38	12	81.6	38	12	81.6
A-25	Torano - Pescara	114	38	12	81.6	38	12	81.6
A-26	Genoa - Gravellona Toce	197.1	28.16	6.8	46.6	28.16	6.8	46.6
A-26	Gravellona Toce	197.1	28.16	6.8	46.6	28.16	6.8	46.6
A-27	Venezia - Belluno	82.5	27.5	24.1	32.8	27.5	24.1	32.8
A-27	Belluno - Venezia	82.5	27.5	1	55.9	27.5	1	55.9
A-28	Portogruaro - Conegliano	48.75	16.25	1.25	37.75	16.25	1.25	37.75
A-28	Conegliano - Portogruaro	48.75	16.25	1.25	37.75	16.25	1.25	37.75
A-30	Caserta - Salerno	55.3	18.43	16.4	21.9	18.43	16.4	21.9
A-30	Salerno - Caserta	55.3	18.43	16.4	21.9	18.43	16.4	21.9
TOTAL LENGTH		10127.9						

Table A.2. Average values, ratios, and maximum and minimum distance for areas, service areas, and facilities in the entire Italian toll motorway network.

Area or facility	Average value of the average distances in each motorway (km)	Ratio of a service or facility in the network (km/facility or area)	Average of the maximum distance (km)	Minimum distance in the network (km)	Maximum distance in the network (km)
Area (service and rest area)	23.14	25.13	43.78	0.8	81.6
Service areas	26.17	30.69	45.23	1	81.6
Toilets	25.7	29.79	45.56	0.8	81.6
Petrol station	26.17	30.69	45.23	1	81.6
Café	26.48	30.97	47.01	1	82.6
Restaurant	37.95	37.79	71.9	1	383
Shop	26.17	30.69	45.23	1	81.6
Picnic area	175.33	482.28	194.6	1	756.4
Playing area for children	143.98	220.17	168.02	1	494.9

Fig. A.1. In Italy, a) Percentage of service areas that have each facility, b) Percentage of rest areas that have each facility



Appendix B: Data from Portugal

Table B.1. List of toll motorways in Portugal, their length and the average, the maximum, and the minimum distance between areas and service areas of each motorway (km).

Code	Itinerary	Length (km)	Service areas			Areas		
			Average distance	Minimum distance	Maximum distance	Average distance	Minimum distance	Maximum distance
A-1	Lisboa - Porto	303	37.88	7.3	50.3	30.3	7.3	44.3
A-1	Porto - Lisboa	303	37.88	7.3	50.3	30.3	7.3	44.3
A-2	Lisboa - Algarve	240	34.29	12	47	34.29	12	47
A-2	Algarve - Lisboa	240	40	31.3	47	40	31.3	47
A-3	Porto - Valença	112	37.33	11	56	37.33	11	56
A-3	Valença - Porto	112	37.33	11	56	37.33	11	56
A-4	Porto - Amarante	60	15	3	37.1	15	3	37.1
A-4	Amarante - Porto	60	15	3	37.1	15	3	37.1
A-5	Lisboa - Cascais	25.1	12.55	10.1	15	12.55	10.1	15
A-5	Cascais - Lisboa	25.1	12.55	10.1	15	12.55	10.1	15
A-6	Marateca - Caia	159	31.8	2	57.3	31.8	2	57.3
A-6	Caia - Marateca	159	31.8	2	57.3	31.8	2	57.3
A-7	Póvoa de Varzim - Vila Pouca de Aguiar	104	26	7	43	26	7	43
A-7	Vila Pouca de Aguiar - Póvoa de Varzim	104	26	7	43	26	7	43
A-8	Lisboa - Leiria	138	27.6	14	35	27.6	14	35
A-8	Leiria - Lisboa	138	27.6	14	35	27.6	14	35
A-9	Estádio Nacional - Alverca	35	17.5	13	22	17.5	13	22
A-9	Alverca - Estádio Nacional	35	17.5	13	22	17.5	13	22
A-10	Bucelas - Benavente	39	39	39	39	39	39	39
A-10	Benavente - Bucelas	39	39	39	39	39	39	39
A-11	Apúlia - Castêlões	80	40	7.7	72.3	40	7.7	72.3
A-11	Castêlões - Apúlia	80	40	7.7	72.3	40	7.7	72.3
A-12	Lisboa - Setúbal	41	20.5	17	24	20.5	17	24
A-12	Setúbal - Lisboa	41	20.5	17	24	20.5	17	24
A-13	Marateca - Coimbra	149	49.67	16	89	49.67	16	89
A-13	Coimbra - Marateca	149	49.67	16	89	49.67	16	89
A-14	Coimbra - Figueira da Foz	40	40	40	40	40	40	40
A-14	Figueira da Foz - Coimbra	40	40	40	40	40	40	40
A-15	Caldas da Rainha - Santarém	40	20	16	23.4	20	16	23.4
A-15	Santarém - Caldas da Rainha	40	20	16.6	23.4	20	16.6	23.4
A-16	Lisboa - Alcabideche	23	23	23	23	23	23	23
A-16	Alcabideche - Lisboa	23	23	23	23	23	23	23
A-17	Marinha Grande - Aveiro	117	29.25	18	41	29.25	18	41
A-17	Aveiro - Marinha Grande	117	29.25	18	41	29.25	18	41
A-21	Ericeira - Venda do Pinheiro	21	10.5	6	15	10.5	6	15
A-21	Venda do Pinheiro - Ericeira	21	10.5	6	15	10.5	6	15
A-22	Bensafrim - Spain	133	26.6	3	37	13.3	2.4	28
A-22	Spain - Bensafrim	133	26.6	3	37	14.78	2.4	31
A-23	Torres Novas - Guarda	217	36.17	2	53	36.17	2	53
A-23	Guarda - Torres Novas	217	36.17	2	53	36.17	2	53
A-24	Viseu - Vila Verde da Raia	162	32.4	10.3	51.7	32.4	10.3	51.7
A-24	Vila Verde da Raia - Viseu	162	32.4	10.3	51.7	32.4	10.3	51.7
A-25	Praia da Barra - Vilar Formoso	197	24.63	4	44	24.63	4	44
A-25	Vilar Formoso - Praia da Barra	197	24.63	4	44	24.63	4	44
A-27	Viana do Castelo - Ponte de Lima	24	24	24	24	24	24	24
A-27	Ponte de Lima - Viana do Castelo	24	24	24	24	24	24	24
A-28	Porto - Caminha	93	23.25	5	46	23.25	5	46
A-28	Caminha - Porto	93	31	18	46	31	18	46
A-29	Angeja - Vilar de Andorinho	56	18.67	8	26	18.67	8	26
A-29	Vilar de Andorinho - Angeja	56	18.67	8	26	18.67	8	26
A-32	Oliveira de Azeméis - Vila Nova de Gaia	34	34	34	34	34	34	34
A-32	Vila Nova de Gaia - Oliveira de Azeméis	34	34	34	34	34	34	34
A-33	Monte de Caparica - Montijo	37	18.5	6.5	30.5	18.5	6.5	30.5
A-33	Montijo - Monte de Caparica	37	12.33	2	28.5	12.33	2	28.5
A-35	Santa Comba Dao - Canas de Senhorim	19	19	19	19	19	19	19
A-35	Canas de Senhorim - Santa Comba Dao	19	19	19	19	19	19	19
A-37	Sintra - Buraca	16	8	6	10	8	6	10
A-37	Buraca - Sintra	16	16	16	16	16	16	16
A-41	Matosinhos - Alfena Espinho	62	31	4	58	31	4	58
A-41	Alfena Espinho - Matosinhos	62	31	4	58	31	4	58
A-42	Alfena - Felgueiras	20	20	20	20	20	20	20
A-42	Felgueiras - Alfena	20	20	20	20	20	20	20
A-43	Gens - Porto	16	16	16	16	16	16	16
A-43	Porto - Gens	16	16	16	16	16	16	16
TOTAL LENGTH		5624.2						

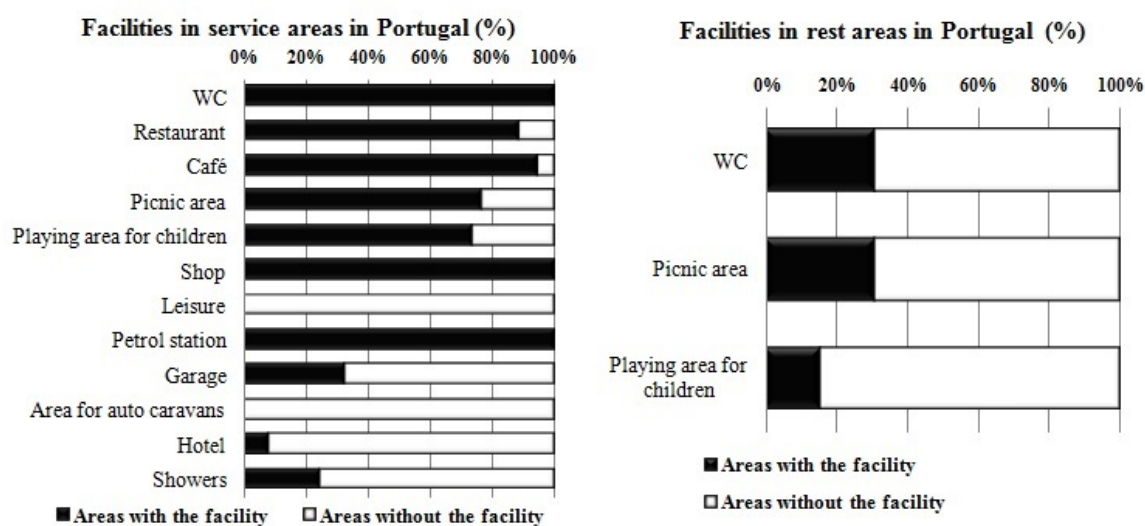
Table B.2. Average values, ratios, and maximum and minimum distance for areas, service areas, and facilities in the entire Portuguese toll motorway network

Area or facility	Average value of the average distances in each motorway (km)	Ratio of a service or facility in the network (km/facility or area)	Average of the maximum distance (km)	Minimum distance in the network (km)	Maximum distance in the network (km)
Area (service and rest area)	25.99	38.26	37.1	2	89
Service areas	26.62	41.97	37.52	2	89
Toilets	26.38	40.76	37.33	2	89
Petrol station	26.62	41.97	37.52	2	89
Café	27.4	44.29	38.14	2	89
Restaurant	28.64	47.26	40.96	2	89
Shop	26.62	41.97	37.52	2	89
Picnic area	31.01	52.56	42	2	89
Paying area for children	31.47	55.69	45.63	2	110

Table B.3. Length and existing service areas in short toll motorways (< 45 km) in Portugal

Motorway	Length (km)	Service areas in each direction
A-5	21	1
A-9	35	1
A-14	40	0
A-15	40	1
A-16	23	0
A-21	21	1
A-27	24	0
A-32	34	0
A-35	19	0
A-37	16	1 and 0
A-42	20	0
A-43	16	0

Fig. B.1. In Portugal, a) Percentage of service areas that have each facility, b) Percentage of rest areas that have each facility



Appendix C: Data from France

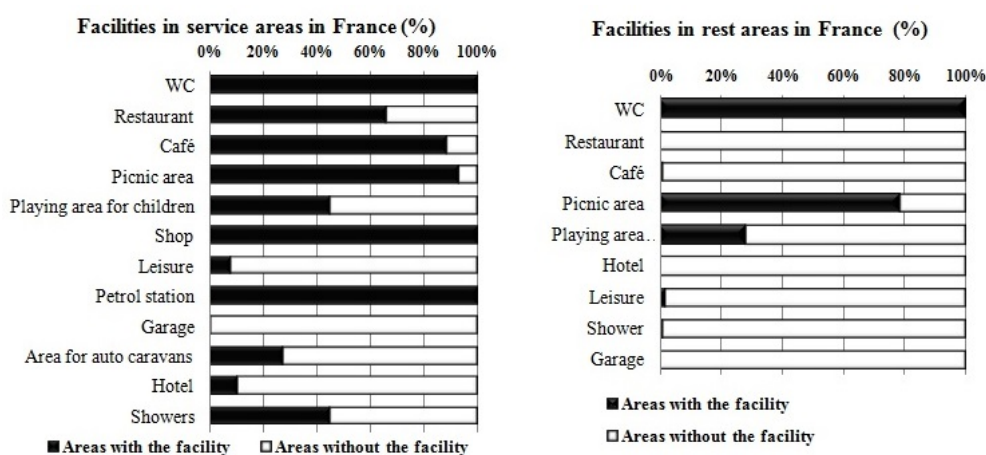
Table C.1. List of toll motorways in France, their length and the average, the maximum, and the minimum distance between areas and service areas of each motorway (km).

Code	Itinerary	Length (km)	Service areas			Areas		
			Average distance	Minimum distance	Maximum distance	Average distance	Minimum distance	Maximum distance
A-1	Paris - Lille	211	30.14	5	54	10.55	2	27
A-1	Lille - Paris	211	30.14	5	54	11.11	3	27
A-2	Combles - Belgium	41	20.5	20	21	10.25	3	18
A-2	Belgium - Combles	41	20.5	20	21	10.25	3	18
A-4	Paris - Strasbourg	484	37.23	18	55	13.08	3	27
A-4	Strasbourg - Paris	484	37.23	18	55	13.08	3	27
A-5	Paris - Langres	238	47.6	30	60	19.83	1	35
A-5	Langres - Paris	238	39.67	5	60	19.83	5	35
A-6	Paris - Lyon	447	31.93	11	49	11.76	5	29
A-6	Lyon - Paris	447	29.8	4	49	11.76	2	29
A-7	Lyon - Marseille	300	33.33	14	58	12.5	2	58
A-7	Marseille - Lyon	300	30	16	59	11.54	2	42
A-8	Coudoux - Italy	224	32	12	44	14	2	36
A-8	Italy - Coudoux	224	32	14	42	14.93	2	35
A-9	Orange - Spain	280	28	2	47	9.66	2	25
A-9	Spain - Orange	280	28	2	47	10	2	30
A-10	Paris - Bordeaux	543	33.94	5	53	12.93	4	23
A-10	Bordeaux - Paris	543	33.94	5	53	12.93	4	23
A-11	Paris - Nantes	343	42.88	30	52	14.29	4	35
A-11	Nantes - Paris	343	42.88	30	52	14.29	4	37
A-13	Paris - Caen	223	31.86	3	50	11.74	2	27
A-13	Caen - Paris	223	31.86	3	50	11.74	2	27
A-16	Paris - Belgium	312	78	68	82	18.35	1	36
A-16	Belgium - Paris	312	62.4	20	87	16.42	1	29
A-19	Sens - Artenay	131	43.67	16	64	21.83	16	31
A-19	Artenay - Sens	131	43.67	16	64	21.83	16	31
A-20	Vierzon - Brive	143	35.75	40	53	23.83	0	40
A-20	Brive - Vierzon	143	47.67	40	53	23.83	0	40
A-23	Valenciennes - Lille	43	21.5	10	33	14.33	10	19
A-23	Lille - Velenciennes	43	21.5	2	41	14.33	2	29
A-25	Lille - Dunkerque	63	31.5	19	44	21	19	22
A-25	Dunkerque - Lille	63	31.5	19	44	21	19	23
A-26	Calais - Troyes	394	56.29	32	98	17.13	5	56
A-26	Troyes - Calais	394	56.29	32	98	16.42	5	49
A-28	Tours - Rouen	285	57	49	75	21.92	1	38
A-28	Rouen - Tours	285	57	49	75	21.92	1	38
A-34	Reims - Sedan	45	22.5	21	24	15	1	23
A-34	Sedan - Reims	45	22.5	21	24	15	1	23
A-39	Dijon - Bourg en Bresse	145	36.25	25	54	14.5	6	26
A-39	Bourg en Bresse - Dijon	145	36.25	25	54	14.5	6	26
A-40	Chamonix - Mâcon	208	41.6	33	50	14.86	5	28
A-40	Mâcon - Chamonix	208	41.6	33	50	16	5	28
A-41 (I)	Grenoble - Chambéry	41	20.5	10	31	8.2	4	15
A-41 (I)	Chambéry - Grenoble	41	20.5	10	31	8.2	4	15
A-41 (II)	Chambéry - Genève	71	23.67	10	34	10.14	1	16
A-41 (II)	Genève - Chambéry	71	23.67	10	34	10.14	1	16
A-43	Lyon - Italy	175	25	0	57	10.94	0	21
A-43	Italy - Lyon	175	25	9	52	10.94	0	24
A-49	Grenoble - Valence	75	25	7	45	12.5	7	16
A-49	Velence - Grenoble	75	25	7	45	10.71	0	17
A-51	Aix-en-Provence - La Saulce	129	43	37	51	16.13	0	41
A-51	La Saulce - Aix-en-Provence	129	32.25	8	43	14.33	0	41
A-54	Nîmes - Salon de Provence	72	36	34	38	12	6	17
A-54	Salon de Provence - Nîmes	72	72	72	72	14	0	27
A-61	Toulouse - Narbonne	147	29.4	18	38	10.5	2	17
A-61	Narbonne - Toulouse	147	29.4	18	38	10.5	1	18
A-62	Bodeaux - Toulouse	242	40.33	17	59	12.74	2	34
A-62	Tolouse - Bordeaux	242	40.33	17	59	12.74	2	34
A-63	Biriatou - Bordeaux	206	34.33	11	65	15.85	6	31
A-63	Bordeaux - Biriatou	206	34.33	11	64	17.17	6	31
A-64	Bayonne - Toulouse	280	40	12	62	20	2	38
A-64	Toulouse - Bayonne	280	40	12	62	20	2	38
A-65	Pau - Langon	150	50	30	69	21.43	11	31
A-65	Langon - Pau	150	50	30	69	21.43	11	31
A-71	Orléans - Clermont Ferrand	289	41.29	28	58	18.06	7	30
A-71	Clermont Ferrand - Orléans	289	41.29	29	58	18.06	7	32
A-77	Paris - Nevers	162	54	45	65	13.5	5	25
A-77	Nevers - Paris	162	54	45	65	13.5	5	25
A-83	Nantes - Niort	145	29	2	54	16.11	2	29
A-83	Niort - Nantes	145	29	2	54	16.11	2	30
A-85	Angers - Vierzon	205	41	23	63	20.5	8	34
A-85	Vierzon - Angers	205	41	23	63	20.5	8	34
A-87	Angers - La Roche sur Yon	129	43	34	53	25.8	10	37
A-87	La Roche sur Yon - Angers	129	43	34	53	25.8	10	37
A-89	Lyon - Bordeaux	539	53.9	36	71	21.56	4	41
A-89	Bordeaux - Lyon	539	53.9	36	71	20.73	4	41
TOTAL LENGTH		16320						

Table C.2. Average values, ratios, and maximum and minimum distance for areas, service areas, and facilities in the entire French toll motorway network.

Area or facility	Average value of the average distances in each motorway (km)	Ratio of a service or facility in the network (km/facility or area)	Average of the maximum distance (km)	Minimum distance in the network (km)	Maximum distance in the network (km)
Area (service and rest area)	15.49	15.75	29.86	0	58
Service areas	37.55	45.46	53.91	0	98
Toilets	15.49	15.75	29.86	0	58
Petrol station	37.55	45.46	53.91	0	98
Café	41.26	50.22	62.53	2	173
Restaurant	52.22	68.28	82.09	2	247
Shop	37.55	45.46	53.91	0	98
Picnic area	19.19	18.8	36.53	0	71
Paying area for children	66.1	46.1	99.72	3	312

Fig. C.1. In France, a) Percentage of service areas that have each facility, b) Percentage of rest areas that have each facility



Appendix D: Data from Spain

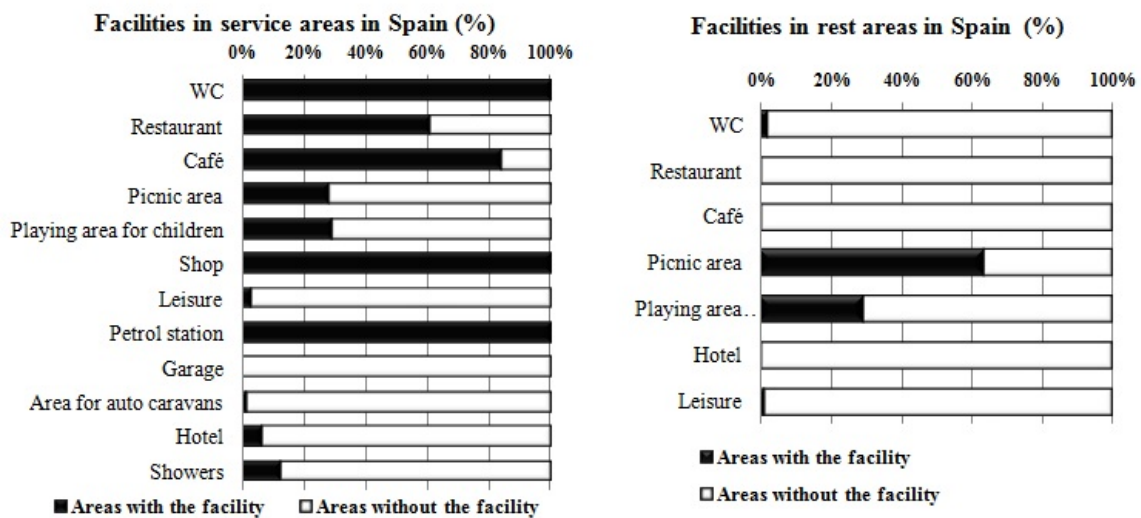
Table D.1. List of toll motorways in Spain, their length and the average, the maximum, and the minimum distance between areas and service areas of each motorway (km).

Code	Itinerary	Length (km)	Service areas			Areas		
			Average distance	Minimum distance	Maximum distance	Average distance	Minimum distance	Maximum distance
AP-1	Vitoria/Gasteiz - Eibar	45	22.5	16	29	22.5	16	29
AP-1	Eibar - Vitoria/Gasteiz	45	22.5	22	23	22.5	22	23
AP-2	Alfajarín - Saífores	232	25.78	11	39	12.21	5	20.5
AP-2	Saífores - Alfajarín	232	25.78	11	39	12.21	5	20.5
AP-4	Sevilla - Cádiz	86	28.67	16	50	28.67	16	50
AP-4	Cádiz - Sevilla	86	28.68	16	43	28.67	16	43
AP-6	Villalba - Adanero	69.8	23.27	2.3	37	7.76	2.3	18.5
AP-6	Adanero - Villalba	69.8	23.27	2.3	39	8.73	2.3	21
AP-7 (I)	La Junquera - La Roca del Vallés	129	21.5	7	35.5	9.21	4.2	22.6
AP-7 (I)	La Roca del Vallés - La Junquera	129	21.5	7	35.5	10.75	4.2	35.5
AP-7 (II)	Martorell - Sagunto	320	32	2	46	22.86	2	46
AP-7 (II)	Sagunto - Martorell	320	32	2	46	21.33	2	46
AP-7 (III)	Silla - Monforte del Cid	176	35.2	7	43	35.2	7	43
AP-7 (III)	Monforte del Cid - Silla	176	35.2	7	43	35.2	7	43
AP-7 (IV)	Cartagena - Vera	95	47.5	32	63	47.5	32	63
AP-7 (IV)	Vera - Cartagena	95	47.5	32	63	47.5	32	63
AP-7 (V)	Guadiaro - Málaga	94	18.8	4	39	15.67	4	33
AP-7 (V)	Málaga - Guadiaro	94	18.8	4	39	15.67	4	33
AP-8	Irun - Bilbo/Bilbao	106	21.2	6	45	17.67	6	34
AP-8	Bilbo/Bilbao - Irun	106	21.2	6	45	17.67	6	34
AP-9	Ferrol - Tuy	170	18.33	16	42	18.89	2	33
AP-9	Tuy - Ferrol	170	28.33	16	42	18.89	2	33
AP-15	Tudela - Irurzun	112.15	28.04	9.65	64	22.43	9.65	33
AP-15	Irurzun - Tudela	112.15	28.04	9.65	64	22.43	9.65	33
C-16	Barcelona - Manresa	56	14	7	21	11.2	4	21
C-16	Manresa - Barcelona	56	14	7	21	14	7	21
C-32 (I)	Vendrell - Barcelona	56	18.67	6.4	34.6	18.67	6.4	34.6
C-32 (I)	Barcelona - Vendrell	56	18.67	6.4	34.6	18.67	6.4	34.6
C-32 (II)	Barcelona - Lloret de Mar	48	16	1	41	16	1.5	41
C-32 (II)	Lloret de Mar - Barcelona	48	16	1.5	41	16	1.5	41
C-33	Barcelona - AP-7	15	7.5	7	8	7.5	7	8
C-33	AP-7 - Barcelona	15	7.5	7	8	7.5	7	8
AP-36	Ocaña - La Roda	120	30	13	42	20	13	25
AP-36	La Roda - Ocaña	120	30	13	42	20	13	25
AP-41	Madrid - Toledo	60	30	29	31	30	29	31
AP-41	Toledo - Madrid	60	30	29	31	30	29	31
AP-46	Alto de las Pedrizas - Puerto de la Torre	24.5	12.25	4	20.5	12.25	4	20.5
AP-46	Puerto de la Torre - Alto de las Pedrizas	24.5	12.25	4	20.5	12.25	4	20.5
AP-51	A-6 Ávila	22	22	22	22	11	22	22
AP-51	Ávila - A-6	22	22	22	22	11	22	22
AP-53	Santiago de C. - Alto de Sto. Domingo	56.6	28.3	27	29.6	28.3	27	29.6
AP-53	Alto de Sto. Domingo - Santiago de C.a	56.6	28.3	27	29.6	28.3	27	29.6
AP-61	San Rafael - Segovia	28	28	28	28	28	28	28
AP-61	Segovia - San Rafael	28	28	28	28	28	28	28
AP-66	Campomanes - Virgen del Camino	77	25.67	17	36	11	3	17
AP-66	Virgen del Camino - Campomanes	77	38.5	17	60	11	4	23
AP-68	Bilbo/Bilbao - Zaragoza	295	29.5	6	46	11.35	6	18
AP-68	Zaragoza - Bilbo/Bilbao	295	29.5	6	46	11.35	6	18
AP-71	León - Astorga	37	18.5	7	30	18.5	7	30
AP-71	Astorga - León	37	18.5	7	30	18.5	7	30
AG-55	A Coruña - Carballo	35	17.5	15	19.5	17.5	15.5	19.5
AG-55	Carballo - A Coruña	35	17.5	15.5	19.5	17.5	15.5	19.5
AG-57	Vigo - Bayona	22.6	22.6	22.6	22.6	22.6	22.6	22.6
AG-57	Bayona - Vigo	22.6	22.6	22.6	22.6	22.6	22.6	22.6
R-2	M-40 - Guadalajara	61	30.5	25	36	30.5	25	36
R-2	Guadalajara - M-40	61	30.5	25	36	30.5	25	36
R-3	M-23 - Arganda del Rey	37	18.5	18	19	18.5	18	19
R-3	Arganda del Rey - M-23	37	18.5	18	19	18.5	18	19
R-4	M-50 - Ocaña	52	17.33	7	26	17.33	7	26
R-4	Ocaña - M-50	52	17.33	7	26	17.33	7	26
R-5	M-40 - Navacarnero	31	10.33	5	19	10.33	5	19
R-5	Navacarnero - M-40	31	10.33	5	19	10.33	5	19
TOTAL LENGTH		5537.3						

Table D.2. Average values, ratios, and maximum and minimum distance for areas, service areas, and facilities in the entire Spanish toll motorway network.

Area or facility	Average value of the average distances in each motorway (km)	Ratio of a service or facility in the network (km/facility or area)	Average of the maximum distance (km)	Minimum distance in the network (km)	Maximum distance in the network (km)
Area (service and rest area)	19.45	20.14	28.95	1.5	63
Service areas	23.75	34.39	34.54	1.5	64
Toilets	23.43	33.76	33.8	1.5	64
Petrol station	23.75	34.39	34.54	1.5	64
Café	28.03	40.42	40.88	1.5	99
Restaurant	38.16	55.37	47.66	1.5	120
Shop	23.55	34.18	34.15	1.5	64
Picnic area	45.19	46.53	55.89	2	135
Playing area for children	46.93	67.53	65.39	5	243

Fig. D.1. In Spain, a) Percentage of service areas that have each facility, b) Percentage of rest areas that have each facility



Appendix E: Data from Poland

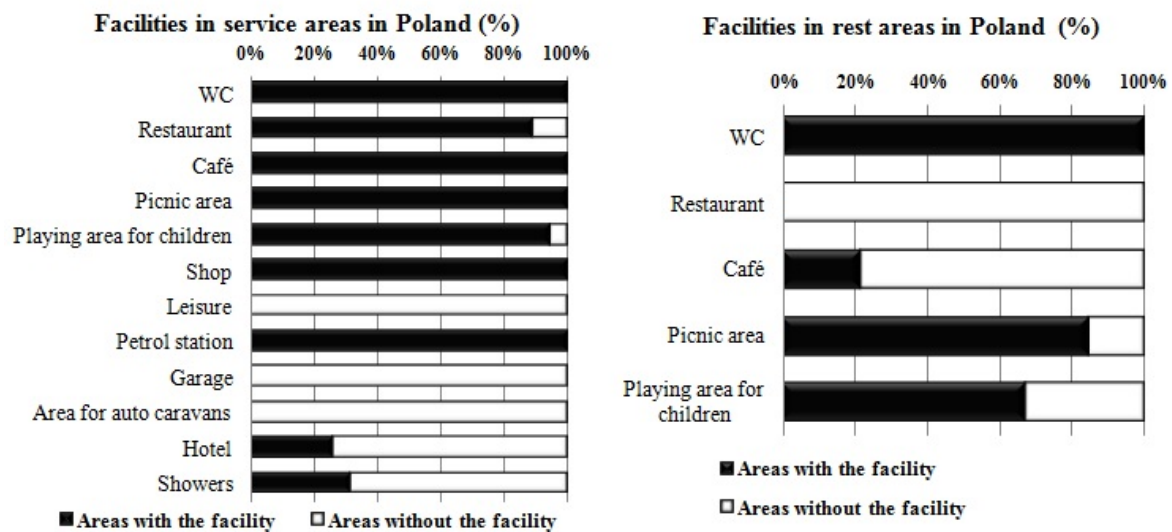
Table E.1. List of toll motorways in Poland, their length and the average, the maximum, and the minimum distance between areas and service areas in each motorway (km)

Code	Itinerary	Length (km)	Service areas			Areas		
			Average distance	Minimum distance	Maximum distance	Average distance	Minimum distance	Maximum distance
A-1	Gdansk - Torun	143.7	47.9	36.5	65.2	17.96	0.4	37.7
A-1	Torun - Gdansk	143.7	47.9	37.2	64.45	17.96	6.4	35.75
A-2	Swiecko - Warsaw	475	43.18	25	80.3	18.27	1	49
A-2	Warsaw - Swiecko	475	43.18	4.7	80.3	17.59	1	49
A-4	Wroklaw - Krakow	243.2	30.4	1.7	45.5	24.32	1.7	36.3
A-4	Krakow - Wroklaw	243.2	30.4	1.7	45.5	22.11	1.7	36.3
TOTAL LENGTH		1723.8						

Table E.2. Average values, ratios, and maximum and minimum distance for areas, service areas, and facilities in the entire Polish toll motorway network.

Area or facility	Average value of the average distances in each motorway (km)	Ratio of a service or facility in the network (km/facility or area)	Average of the maximum distance (km)	Minimum distance in the network (km)	Maximum distance in the network (km)
Area (service and rest area)	19.7	20.52	40.68	0.4	49
Service areas	40.49	45.36	63.54	1.7	80.3
Toilets	19.7	20.52	40.68	0.4	49
Petrol station	40.49	45.36	63.54	1.7	80.3
Café	30.51	35.91	54.18	0.4	80.3
Restaurant	72.43	50.7	89.83	1.7	143.7
Shop	40.49	45.36	63.54	1.7	80.3
Picnic area	20.62	22.39	40.68	0.4	49
Playing area for children	30.6	25.73	64.06	0.4	64.06

Fig. E.1. In Poland, a) Percentage of service areas that have each facility, b) Percentage of rest areas that have each facility



Appendix F: Data from Greece

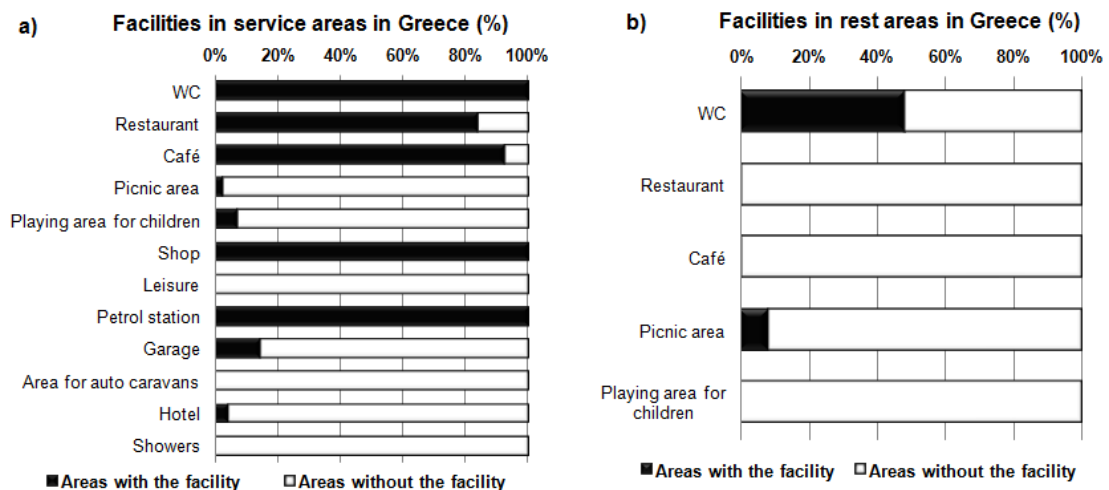
Table F.1. List of toll motorways in Greece, their length and the average, the maximum, and the minimum distance between areas and service areas in each motorway (km)

Code	Itinerary	Length (km)	Service areas			Areas		
			Average distance	Minimum distance	Maximum distance	Average distance	Minimum distance	Maximum distance
A-1 (I)	Athens - Thessaloniki	375	23.44	1	54	10.14	1	36
A-1 (I)	Thessaloniki - Athens	375	31.25	1	54	11.36	1	34
A-1 (II)	Athens - Thessaloniki	59	19.67	1	35	7.38	1	12
A-1 (II)	Thessaloniki - Athens	59	19.67	1	35	11.8	1	20
A-2 (I)	Igoumenitsa - Thessaloniki	287	143.5	3.5	283.5	57.4	3.5	114
A-2 (I)	Thessaloniki - Igoumenitsa	287	143.5	3.5	283.5	47.83	3.5	112.5
A-2 (II)	Thessaloniki - Kipoi	337	337	337	337	56.17	16	94
A-2 (II)	Kipoi - Thessaloniki	337	337	337	337	48.14	15.5	93
A-3	Xiniada - Trikala	80	26.67	12	40.7	11.43	3	18.3
A-3	Trikala - Xiniada	80	26.67	12	40.7	11.43	3	18.3
A-5	Antirio - Ioannina	190	31.67	2	73.5	7.6	2	21
A-5	Ioannina - Antirio	190	38	2	58.5	7.92	2	16
A-6	Eleusis - Athens Airport	48	16	8.3	30.1	16	8.3	30.1
A-6	Athens Airport - Eleusis	48	16	8.3	30.1	16	8.3	30.1
A-7	Corinth - Kalamata	150	30	9	70.1	8.33	1.5	13
A-7	Kalamata -Corinth	150	37.5	9	70.1	9.38	4.8	18.5
A-71	Tripolis - Sparta	45	22.5	15	30	9	5	15
A-71	Sparta - Tripolis	45	22.5	15	30	9	5	15
A-8 (I)	Elefsina - Corinth	51	25.5	15	36	8.5	2	18
A-8 (I)	Corinth - Elefsina	51	25.5	15	36	8.5	3	15
A-8 (II)	Corinth - Patras	117	23.4	7	49	10.64	3	18
A-8 (II)	Patras - Corinth	117	23.4	7	49	10.64	6	15
TOTAL LENGTH		3478						

Table F.2. Average values, ratios, and maximum and minimum distance for areas, service areas, and facilities in the entire Greek toll motorway network

Area or facility	Average value of the average distances in each motorway (km)	Ratio of a service or facility in the network (km/facility or area)	Average of the maximum distance (km)	Minimum distance in the network (km)	Maximum distance in the network (km)
Area (service and rest area)	17.94	14.99	35.31	1	114
Service areas	64.56	51.15	93.76	1	337
Toilets	25.31	23.66	48.09	1	169.5
Petrol station	64.56	51.15	93.76	1	337
Café	66.08	54.34	98.47	1	337
Restaurant	68.54	59.97	104.15	1	337
Shop	64.56	51.15	93.76	1	337
Picnic area	97.64	217.38	115.36	7	269
Playing area for children	147.05	695.6	150.5	45	375

Fig. F.1. In Greece, a) Percentage of service areas that have each facility, b) Percentage of rest areas that have each facility



Appendix G: Data from the Slovak Republic

Table G.1. List of toll motorways in the Slovak Republic, their length and the average, the maximum, and the minimum distance between areas and service areas in each motorway (km).

Code	Itinerary	Length (km)	Service areas			Areas		
			Average distance	Minimum distance	Maximum distance	Average distance	Minimum distance	Maximum distance
D-1 (I)	Bratislava – Presov (I)	187	26,71	12	36	13,36	5	23
D-1 (I)	Presov – Bratislava (I)	187	31,17	13	57	14,38	7	22
D-1 (II)	Bratislava – Presov (II)	144	28,8	1	91	14,4	1	82
D-1 (II)	Presov – Bratislava (II)	144	36	2	91	24	2	82
D-2	Kúty - Cunovo	80	20	8	50	8,89	0	22,5
D-2	Cunovo - Kúty	80	20	8	50	11,43	7,5	22,5
TOTAL LENGTH		411						

Table G.2. Average values, ratios, and maximum and minimum distance for areas, service areas, and facilities in the entire Slovak toll motorway network.

Area or facility	Average value of the average distances in each motorway (km)	Ratio of a service or facility in the network (km/facility or area)	Average of the maximum distance (km)	Minimum distance in the network (km)	Maximum distance in the network (km)
Area (service and rest area)	14.41	15.51	42.33	0	82
Service areas	27.11	34.25	62.5	1	91
Toilets	16.2	17.49	46.92	0	82
Petrol station	27.11	34.25	62.5	1	91
Café	23.53	26.52	56.25	1	84
Restaurant	29.48	32.88	64.08	1	84
Shop	27.11	34.25	62.5	1	91
Picnic area	26.33	23.49	65.17	2	82
Playing area for children	41.47	30.44	76.17	2	82

Fig. G.3. In the Slovak Republic, a) Percentage of service areas that have each facility, b) Percentage of rest areas that have each facility

