

Online appendix A.3: problem instances to Chapter 3

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1. Trips generated for bulky waste instance

Table A.3.1: Trips generated using the reduced trip heuristic of Chapter 3, in the case of bulky waste . Each trip starts and ends at the depot, which is at the same location as the client. 46 trips were generated a priori.

trip id	site A	site B	trip id	site A	site B
1	Aalter(1)		27	Nevele(10)	
2	Assenede(2)		28	Nevele(10)	Nevele(10)
3	De Pinte(3)		29	Sint-Laureins(11)	
4	De Pinte(3)	De Pinte(3)	30	Sint-Martens-Latem(12)	
5	De Pinte(3)	Gavere(5)	31	Sint-Martens-Latem(12)	Merelbeke(8)
6	De Pinte(3)	Merelbeke(8)	32	Sint-Martens-Latem(12)	Nevele(10)
7	De Pinte(3)	Nevele(10)	33	Waarschoot(13)	
8	De Pinte(3)	Sint-Martens-Latem(12)	34	Zomergem(14)	
9	Evergem(4)		35	Zulte(15)	
10	Evergem(4)	Evergem(4)	36	Zulte(15)	De Pinte(3)
11	Gavere(5)		37	Zulte(15)	Merelbeke(8)
12	Gavere(5)	Gavere(5)	38	Zulte(15)	Nevele(10)
13	Gavere(5)	Merelbeke(8)	39	Deinze(16)	
14	Gavere(5)	Sint-Martens-Latem(12)	40	Deinze(16)	De Pinte(3)
15	Gavere(5)	Zulte(15)	41	Deinze(16)	Nazareth(9)
16	Gavere(5)	Deinze(16)	42	Deinze(16)	Nevele(10)
17	Lovendegem(6)		43	Deinze(16)	Sint-Martens-Latem(12)
18	Lovendegem(6)	Lovendegem(6)	44	Deinze(16)	Zulte(15)
19	Maldebeke(7)		45	Deinze(16)	Deinze(16)
20	Merelbeke(8)		46	Eeklo(17)	
21	Merelbeke(8)	Merelbeke(8)			
22	Nazareth(9)				
23	Nazareth(9)	De Pinte(3)			
24	Nazareth(9)	Gavere(5)			
25	Nazareth(9)	Merelbeke(8)			
26	Nazareth(9)	Nevele(10)			

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2. Fill rate data

Table A.3.2: Fill rates per day for the bulky waste instances B...0, B...1, B...2 and B...3. All fill rates are in m³. Since no fill rates are available for site 18 (Knesselare), this site is left out of the model.

site / day [m ³]	1		2		3		4		5		6		7		8		9		10		11		12		
	Mond.	Tuesd.	Wednesd.	Thursd.	Frid.	Saturd.	Mond.	Tuesd.	Wednesd.	Thursd.	Frid.	Saturd.	Mond.	Tuesd.	Wednesd.	Thursd.	Frid.	Saturd.	Mond.	Tuesd.	Wednesd.	Thursd.	Frid.	Saturd.	
1 Aalter	26.13	-	26.13	26.13	39.20	39.20	26.13	26.13	39.20	39.20	26.13	26.13	39.20	39.20	26.13	26.13	39.20	39.20	26.13	26.13	39.20	39.20	26.13	26.13	39.20
2 Assenede	-	19.60	19.60	13.07	13.07	13.07	-	-	-	-	-	-	-	-	19.60	19.60	13.07	13.07	13.07	13.07	13.07	13.07	13.07	13.07	
3 De Pinte	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	
4 Evergem	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	
5 Gavere	-	7.35	7.35	7.35	7.35	7.35	-	-	-	-	-	-	-	-	7.35	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	
6 Lovendegem	-	1.84	1.84	1.84	1.84	1.84	-	-	-	-	-	-	-	-	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	
7 Maldegem	-	7.84	9.80	9.80	9.80	9.80	-	-	-	-	-	-	-	-	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	
8 Merelbeke	9.80	9.80	9.80	29.40	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	
9 Nazareth	39.20	-	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	-	39.20	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80	
10 Nevele	9.80	-	29.40	-	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80	-	29.40	-	9.80	9.80	-	9.80	9.80	9.80	9.80	9.80	
11 Sint-Laureins	-	19.60	19.60	-	19.60	19.60	-	-	-	-	-	-	-	-	9.80	-	9.80	-	-	9.80	-	9.80	9.80	9.80	
12 Sint-Martens-L.	13.07	-	9.80	-	9.80	9.80	-	-	-	-	-	-	9.80	-	-	-	9.80	-	-	9.80	-	9.80	9.80	9.80	
13 Waarschoot	-	6.53	6.53	-	6.53	6.53	-	-	-	-	-	-	-	-	6.53	6.53	-	-	6.53	6.53	-	6.53	6.53	6.53	
14 Zomergem	-	6.53	6.53	6.53	6.53	6.53	-	-	-	-	-	-	-	-	6.53	6.53	6.53	6.53	6.53	6.53	6.53	6.53	6.53	6.53	
15 Zulte	13.07	19.60	19.60	-	26.13	26.13	26.13	26.13	26.13	26.13	26.13	26.13	26.13	19.60	19.60	19.60	-	13.07	13.07	13.07	13.07	13.07	13.07	13.07	
16 Deinze	-	9.80	9.80	9.80	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	14.70	14.70	29.40	14.70	29.40	14.70	14.70	14.70	14.70	14.70	14.70	
17 Beklo	-	39.20	39.20	39.20	39.20	19.60	-	-	-	-	-	-	-	-	39.20	-	39.20	-	-	39.20	-	19.60	19.60	19.60	
18 Knesselare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table A.3.3: Fill rates per day for the bulky waste instance B...4. All fill rates are in m³.

site / day [m ³]	1		2		3		4		5		6		7		8		9		10		11		12	
	Mond.	Tuesd.	Wednesd.	Thursd.	Frid.	Saturd.	Mond.	Tuesd.	Wednesd.	Thursd.	Frid.	Saturd.	Mond.	Tuesd.	Wednesd.	Thursd.	Frid.	Saturd.	Mond.	Tuesd.	Wednesd.	Thursd.	Frid.	Saturd.
1 Begijnendijk	0.00	13.91	13.91	9.27	9.27	9.27	0.00	13.91	13.91	13.91	9.27	9.27	0.00	13.91	13.91	13.91	9.27	9.27	9.27	9.27	9.27	9.27	9.27	9.27
2 Bertem	13.26	0.00	13.26	13.26	0.00	53.03	13.26	13.26	13.26	13.26	0.00	53.03	13.26	13.26	13.26	13.26	13.26	13.26	13.26	13.26	0.00	53.03	53.03	53.03
3 Bierbeek	8.35	0.00	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	0.00	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35
4 Boortmeerbeek	0.00	7.18	7.18	7.18	7.18	0.00	7.18	7.18	7.18	7.18	0.00	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.18
5 Boutersem	0.00	1.61	1.61	1.61	1.61	1.61	0.00	1.61	1.61	1.61	0.00	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61
6 Haacht	0.00	4.80	6.00	6.00	6.00	6.00	0.00	4.80	4.80	4.80	0.00	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80
7 Herent	0.00	8.62	8.62	25.85	6.46	6.46	6.46	6.46	6.46	6.46	0.00	6.46	6.46	6.46	6.46	6.46	6.46	6.46	6.46	6.46	6.46	6.46	6.46	6.46
8 Holsbeek	0.00	0.00	6.75	0.00	6.75	6.75	0.00	6.75	6.75	6.75	0.00	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75
9 Keerbergen	10.31	0.00	30.94	0.00	10.31	0.00	10.31	0.00	10.31	0.00	10.31	0.00	10.31	0.00	30.94	0.00	10.31	0.00	10.31	0.00	10.31	0.00	10.31	0.00
10 Kortenberg	0.00	58.56	58.56	0.00	58.56	58.56	0.00	58.56	58.56	58.56	0.00	58.56	58.56	58.56	58.56	58.56	58.56	58.56	58.56	58.56	58.56	58.56	58.56	58.56
11 Leuven_Aarschotsesteenweg	63.21	0.00	47.41	0.00	47.41	47.41	47.41	47.41	47.41	47.41	0.00	47.41	47.41	47.41	47.41	47.41	47.41	47.41	47.41	47.41	47.41	47.41	47.41	47.41
12 Leuven_Diestsesteenweg	0.00	24.97	24.97	0.00	24.97	24.97	0.00	24.97	24.97	24.97	0.00	24.97	24.97	24.97	24.97	24.97	24.97	24.97	24.97	24.97	24.97	24.97	24.97	24.97
13 Leuven_Grauwmeer	0.00	24.73	24.73	24.73	24.73	24.73	0.00	24.73	24.73	24.73	0.00	24.73	24.73	24.73	24.73	24.73	24.73	24.73	24.73	24.73	24.73	24.73	24.73	24.73
14 Lubbeek	12.10	18.15	18.15	0.00	24.20	24.20	24.20	24.20	24.20	24.20	0.00	18.15	18.15	18.15	0.00	12.10	12.10	12.10	12.10	12.10	12.10	12.10	12.10	12.10
15 Oud-Heverlee	0.00	3.85	3.85	0.00	11.54	11.54	0.00	11.54	11.54	11.54	0.00	3.85	3.85	3.85	0.00	11.54	11.54	11.54	11.54	11.54	11.54	11.54	11.54	11.54
16 Rotselaar	0.00	31.17	31.17	31.17	15.58	0.00	0.00	31.17	15.58	0.00	0.00	31.17	31.17	31.17	31.17	31.17	31.17	31.17	31.17	31.17	31.17	15.58	0.00	0.00
17 Tielt-Winge	13.66	0.00	13.66	0.00	20.48	20.48	20.48	20.48	20.48	20.48	0.00	13.66	13.66	13.66	0.00	13.66	13.66	13.66	13.66	13.66	13.66	13.66	13.66	13.66
18 Tremelo	0.00	0.00	20.51	13.67	13.67	13.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.51	13.67	13.67	13.67	13.67	13.67	13.67	13.67	13.67	13.67

Table A.3.4: Fill rates per day for the bulky waste instance B...5. All fill rates are in m³.

site / day [m ³]	1		2		3		4		5		6		7		8		9		10					
	Mond.	Tuesd.	Wednesd.	Thursd.	Frid.	Saturd.	Mond.	Tuesd.	Wednesd.	Thursd.	Frid.	Saturd.	Mond.	Tuesd.	Wednesd.	Thursd.	Frid.	Saturd.	Mond.	Tuesd.	Wednesd.	Thursd.	Frid.	Saturd.
1 Bekkevoort	2.51	2.51	2.51	7.52	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88
2 Bierbeek	30.00	0.00	6.79	6.79	6.79	6.79	6.79	6.79	6.79	6.79	0.00	30.00	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49
3 Boutersem	6.63	0.00	19.88	0.00	6.63	6.63	6.63	6.63	6.63	6.63	0.00	19.88	0.00	19.88	0.00	19.88	0.00	19.88	0.00	19.88	0.00	19.88	0.00	19.88
4 Geetbets	0.00	17.65	17.65	0.00	17.65	17.65	0.00	17.65	17.65	17.65	0.00	8.82	8.82	8.82	8.82	8.82	8.82	8.82	8.82	8.82	8.82	8.82	8.82	8.82
5 Glabbeek	8.21	0.00	6.16	0.00	6.16	6.16	6.16	6.16	6.16	6.16	0.00	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16
6 Hoegaarden	0.00	5.64	0.00	0.00	5.64	5.64	0.00	0.00	5.64	5.64	0.00	0.00	5.64	0.00	5.64	0.00	5.64	0.00	5.64	0.00	5.64	0.00	5.64	0.00
7 Holsbeek	0.00	8.13	0.00	8.13	8.13	8.13	0.00	0.00	8.13	8.13	0.00	0.00	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13
8 Kortenaaken	6.55	9.82	9.82	0.00	13.09	13.09	13.09	13.09	13.09	13.09	0.00	9.82	9.82	9.82	9.82	9.82	9.82	9.82	9.82	9.82	9.82	9.82	9.82	9.82
9 Landen	0.00	5.52	5.52	5.52	16.55	16.55	16.55	16.55	16.55	16.55	0.00	8.28	8.28	8.28	8.28	8.28	8.28	8.28	8.28	8.28	8.28	8.28	8.28	8.28
10 Linter	0.00	13.48	13.48	13.48	13.48	6.74	6.74	6.74	6.74	6.74	0.00	13.48	13.48	13.48	13.48	13.48	13.48	13.48	13.48	13.48	13.48	13.48	13.48	13.48
11 Lubbeek	18.51	0.00	0.00	18.51	27.76	27.76	27.76	27.76	27.76	27.76	18.51	0.00	18.51	18.51	18.51	18.51	18.51	18.51	18.51	18.51	18.51	18.51	18.51	18.51
12 Scherpenheuvel-Zichem	0.00	31.65	31.65	21.10	21.10	21.10	21.10	21.10	21.10	21.10	0.00	31.65	31.65	31.65	21.10	21.10								

Table A.3.5: Fill rates per day for the bulky waste instance B...6. All fill rates are in m³.

	1	2	3	4	5	6	7	8	9	10
1	Begijnendijk	0.00	5.49	5.49	5.49	5.49	0.00	5.49	5.49	5.49
2	Bekkevoort	2.77	2.77	2.77	2.77	2.77	2.77	2.77	2.77	2.77
3	Bertem	10.61	10.61	10.61	0.00	10.61	10.61	10.61	0.00	10.61
4	Bierbeek	4.01	4.01	4.01	4.01	4.01	4.01	4.01	4.01	4.01
5	Boortmeerbeek	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56
6	Boutersem	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57
7	Geetbets	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09
8	Glabbeek	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65
9	Haacht	0.00	7.08	7.08	7.08	7.08	0.00	7.08	7.08	7.08
10	Herent	10.82	10.82	10.82	10.82	10.82	10.82	10.82	10.82	10.82
11	Hoegaarden	5.11	5.11	0.00	5.11	5.11	5.11	0.00	5.11	5.11
12	Holsbeek	0.00	4.75	0.00	4.75	4.75	0.00	4.75	0.00	4.75
13	Keerbergen	3.06	3.06	3.06	3.06	0.00	3.06	3.06	3.06	0.00
14	Kortenaken	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98
15	Kortenaken	17.56	17.56	0.00	17.56	17.56	17.56	0.00	17.56	17.56
16	Landen	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20
17	Leuven_Aarschotsesteenweg	20.26	20.26	20.26	20.26	20.26	20.26	20.26	20.26	20.26
18	Leuven_Diestsesteenweg	0.00	21.41	0.00	21.41	21.41	0.00	21.41	0.00	21.41
19	Leuven_Grauwmeer	0.00	16.76	16.76	16.76	16.76	0.00	16.76	16.76	16.76
20	Linters	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
21	Lubbeek	5.18	5.18	0.00	5.18	5.18	5.18	0.00	5.18	5.18
22	Oud-Heverlee	0.00	3.53	0.00	3.53	3.53	0.00	3.53	0.00	3.53

Table A.3.6: Fill rates per week (every Wednesday) for hard plastics used in instances P...0, P...1, P...2 and P...3. To convert to PVC, a ratio between e.g. 7% and 13% could be applied. All fill rates are in m³. No fill rates available for site 3 (De Pinte).

	1	2	3	4	5	6	7	8	9	10	11	12
site / day [m ³]	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.
1	Aalter	28.02	28.02	28.02	28.02	28.02	28.02	28.02	28.02	28.02	28.02	28.02
2	Assenede	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29
3	De Pinte	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Evergem	54.12	54.12	54.12	54.12	54.12	54.12	54.12	54.12	54.12	54.12	54.12
5	Gavere	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52
6	Lovendegem	26.36	26.36	26.36	26.36	26.36	26.36	26.36	26.36	26.36	26.36	26.36
7	Maldegem	27.29	27.29	27.29	27.29	27.29	27.29	27.29	27.29	27.29	27.29	27.29
8	Merebeke	17.42	17.42	17.42	17.42	17.42	17.42	17.42	17.42	17.42	17.42	17.42
9	Nazareth	13.74	13.74	13.74	13.74	13.74	13.74	13.74	13.74	13.74	13.74	13.74
10	Nevele	25.24	25.24	25.24	25.24	25.24	25.24	25.24	25.24	25.24	25.24	25.24
11	Sint-Laureins	9.95	9.95	9.95	9.95	9.95	9.95	9.95	9.95	9.95	9.95	9.95
12	Sint-Martens-Latem	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12
13	Waarschoot	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32
14	Zomergem	11.29	11.29	11.29	11.29	11.29	11.29	11.29	11.29	11.29	11.29	11.29
15	Zulte	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05
16	Deinze	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75
17	Eeklo	30.57	30.57	30.57	30.57	30.57	30.57	30.57	30.57	30.57	30.57	30.57
18	Knesselare	11.31	11.31	11.31	11.31	11.31	11.31	11.31	11.31	11.31	11.31	11.31

Table A.3.7: Fill rates per week (every Wednesday) for hard plastics used in instance P...5. To convert to PVC, a ratio between e.g. 7% and 13% could be applied. All fill rates are in m³. Fill rates are fictional but realistic.

	1	2	3	4	5	6	7	8	9	10	11	12
site / day [m ³]	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.	Wednesd.
1	Bekkevoort	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
2	Bierbeek	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29
3	Boutersem	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87
4	Geetbets	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
5	Glabbeek	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
6	Hoegaarden	1.56	1.56	1.56	0.00	1.56	1.56	1.56	1.56	0.00	1.56	1.56
7	Holsbeek	0.00	2.27	2.27	0.00	2.27	2.27	0.00	2.27	0.00	2.27	2.27
8	Kortenaken	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79
9	Landen	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
10	Linters	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
11	Lubbeek	3.31	3.31	3.31	0.00	3.31	3.31	3.31	3.31	0.00	3.31	3.31
12	Scherpenheuvel-Zichem	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23
13	Tielt-Winge	2.44	2.44	2.44	0.00	2.44	2.44	2.44	2.44	0.00	2.44	2.44
14	Tienen	7.94	7.94	7.94	7.94	7.94	7.94	7.94	7.94	7.94	7.94	7.94
15	Zoutleeuw	0.00	1.93	0.00	0.00	1.93	0.00	1.93	0.00	0.00	1.93	1.93

3. Travel time data

Table A.3.8: Travel time matrix: travel times between origin (row) and destination (column) points in hours. Calculated for cars at a Monday morning, around 10:00 a.m. Obtained using Google Maps.

from (row) / to (column)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Dep.	Cl.	
	Aal.	Ass.	DPi.	Eve.	Gav.	Lov.	Mal.	Mer.	Naz.	Nev.	StL.	StM.	Waa.	Zom.	Zul.	Dei.	Eek.	Kne.			
1 Aalter	0	0.49	0.53	0.58	0.61	0.39	0.25	0.52	0.52	0.31	0.48	0.44	0.42	0.29	0.46	0.43	0.34	0.19	0.38	0.83	
2 Assenede	0.50	0	0.63	0.25	0.70	0.41	0.30	0.61	0.66	0.64	0.23	0.58	0.27	0.48	0.76	0.75	0.25	0.42	0.27	1.18	
3 De Pinte	0.53	0.63	0	0.47	0.21	0.39	0.71	0.32	0.16	0.36	0.81	0.14	0.55	0.51	0.37	0.37	0.70	0.58	0.76	1.09	
4 Evergem	0.60	0.25	0.47	0	0.55	0.25	0.49	0.46	0.51	0.48	0.42	0.43	0.32	0.40	0.62	0.60	0.44	0.61	0.46	1.14	
5 Gavere	0.56	0.69	0.22	0.52	0	0.44	0.74	0.23	0.19	0.40	0.86	0.28	0.60	0.59	0.32	0.32	0.75	0.69	0.80	1.07	
6 Lovendegem	0.36	0.39	0.37	0.23	0.45	0	0.45	0.36	0.41	0.28	0.49	0.33	0.20	0.16	0.52	0.50	0.35	0.39	0.40	1.02	
7 Maldegem	0.25	0.28	0.75	0.47	0.80	0.41	0	0.75	0.69	0.44	0.27	0.63	0.34	0.30	0.58	0.54	0.16	0.17	0.13	0.93	
8 Merelbeke	0.53	0.58	0.32	0.42	0.25	0.34	0.71	0	0.32	0.42	0.76	0.37	0.49	0.49	0.47	0.47	0.65	0.65	0.70	1.09	
9 Nazareth	0.50	0.67	0.15	0.51	0.20	0.43	0.68	0.33	0	0.25	0.85	0.12	0.58	0.46	0.27	0.27	0.70	0.63	0.79	1.03	
10 Nevele	0.31	0.63	0.31	0.46	0.42	0.32	0.48	0.37	0.26	0	0.68	0	0.19	0.39	0.27	0.26	0.21	0.50	0.43	0.58	0.86
11 St-Laureins	0.49	0.24	0.79	0.43	0.86	0.48	0.28	0.77	0.82	0.68	0	0.74	0.30	0.50	0.82	0.78	0.26	0.41	0.18	1.16	
12 St-M-Latem	0.44	0.58	0.15	0.42	0.30	0.34	0.62	0.31	0.13	0.19	0.76	0	0.49	0.40	0.30	0.26	0.64	0.57	0.69	1.00	
13 Waarschoot	0.43	0.27	0.53	0.31	0.61	0.18	0.35	0.51	0.57	0.38	0.30	0.49	0	0.20	0.64	0.60	0.25	0.41	0.30	1.12	
14 Zomergem	0.29	0.46	0.53	0.37	0.59	0.19	0.31	0.50	0.47	0.27	0.48	0.40	0.19	0	0.53	0.49	0.29	0.30	0.39	1.01	
15 Zulte	0.49	0.81	0.36	0.65	0.42	0.57	0.64	0.46	0.27	0.26	0.87	0.28	0.65	0.54	0	0.10	0.71	0.58	0.77	0.98	
16 Deinze	0.46	0.77	0.34	0.60	0.40	0.53	0.61	0.44	0.25	0.21	0.84	0.24	0.61	0.49	0.10	0	0.69	0.55	0.74	1.04	
17 Eeklo	0.35	0.25	0.67	0.43	0.75	0.32	0.16	0.65	0.71	0.50	0.27	0.63	0.24	0.29	0.67	0.64	0	0.33	0.13	1.04	
18 Knesselare	0.19	0.41	0.64	0.60	0.71	0.43	0.17	0.62	0.63	0.38	0.40	0.57	0.41	0.30	0.52	0.48	0.31	0	0.30	0.80	
Depot	0.38	0.27	0.72	0.45	0.79	0.37	0.12	0.70	0.75	0.56	0.19	0.67	0.29	0.39	0.70	0.67	0.11	0.29	0	1.05	
Client	0.87	1.16	1.04	1.14	1.12	1.06	0.93	1.03	1.00	0.84	1.15	0.98	1.12	1.01	0.97	1.03	1.06	0.79	1.05	0	

Table A.3.9: Travel time matrix (hgv): travel times between origin (row) and destination (column) points in hours. Calculated for a heavy goods vehicle without real-time travel information. Obtained using OpenRouteService.

from (row) / to (column)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Dep.	Cl.
	Aal.	Asse.	DPi.	Eve.	Gav.	Lov.	Mal.	Mer.	Naz.	Nev.	StL.	StM.	Waa.	Zom.	Zul.	Dei.	Eek.	Kne.		
1 Aalter	0	0.60	0.61	0.61	0.68	0.37	0.29	0.55	0.53	0.30	0.47	0.49	0.44	0.32	0.48	0.46	0.34	0.20	0.39	1.04
2 Assenede	0.62	0	0.59	0.21	0.66	0.33	0.37	0.54	0.63	0.60	0.22	0.52	0.28	0.46	0.70	0.68	0.28	0.54	0.29	1.44
3 De Pinte	0.60	0.60	0	0.46	0.22	0.39	0.74	0.28	0.20	0.31	0.74	0.17	0.53	0.58	0.38	0.36	0.66	0.65	0.70	1.38
4 Evergem	0.58	0.21	0.45	0	0.53	0.19	0.53	0.40	0.49	0.47	0.38	0.38	0.35	0.56	0.55	0.44	0.63	0.45	1.36	
5 Gavere	0.65	0.66	0.21	0.52	0	0.44	0.79	0.21	0.18	0.38	0.79	0.26	0.64	0.30	0.28	0.71	0.71	0.75	1.35	
6 Lovendegem	0.37	0.33	0.37	0.19	0.45	0	0.39	0.32	0.42	0.27	0.36	0.31	0.15	0.17	0.46	0.44	0.28	0.41	0.32	1.25
7 Maldegem	0.29	0.35	0.75	0.51	0.82	0.39	0	0.69	0.67	0.44	0.33	0.63	0.29	0.38	0.62	0.60	0.16	0.21	1.12	1.11
8 Merelbeke	0.56	0.54	0.28	0.40	0.21	0.32	0.70	0	0.30	0.45	0.68	0.32	0.47	0.49	0.45	0.43	0.60	0.61	0.64	1.34
9 Nazareth	0.53	0.66	0.20	0.52	0.18	0.44	0.67	0.30	0.26	0.29	0.67	0.46	0.25	0.29	0.46	0.25	0.58	0.76	1.15	
10 Nevele	0.30	0.61	0.31	0.47	0.38	0.27	0.44	0.41	0.26	0	0.58	0.18	0.37	0.27	0.24	0.23	0.49	0.35	0.54	1.09
11 St-Laureins	0.47	0.22	0.72	0.38	0.80	0.36	0.35	0.67	0.77	0.58	0	0.66	0.25	0.36	0.77	0.75	0.19	0.52	0.23	1.35
12 St-M-Latem	0.47	0.53	0.15	0.39	0.26	0.31	0.61	0.27	0.13	0.17	0.66	0	0.45	0.37	0.22	0.20	0.58	0.53	0.62	1.26
13 Waarschoot	0.44	0.29	0.52	0.33	0.60	0.15	0.29	0.47	0.56	0.37	0.25	0.45	0	0.16	0.56	0.54	0.18	0.41	0.22	1.32
14 Zomergem	0.32	0.46	0.51	0.35	0.59	0.17	0.38	0.46	0.46	0.27	0.36	0.38	0.16	0	0.46	0.44	0.25	0.29	0.32	1.19
15 Zulte	0.47	0.71	0.38	0.57	0.30	0.46	0.61	0.47	0.24	0.25	0.78	0.22	0.56	0.46	0	0.08	0.66	0.52	0.71	1.03
16 Deinze	0.45	0.69	0.36	0.56	0.28	0.44	0.59	0.45	0.23	0.23	0.77	0.20	0.54	0.44	0.08	0	0.64	0.50	0.69	1.04
17 Eeklo	0.34	0.27	0.65	0.43	0.72	0.28	0.16	0.59	0.69	0.49	0.19	0.58	0.18	0.27	0.67	0.65	0	0.31	0.09	1.23
18 Knesselare	0.20	0.52	0.66	0.68	0.74	0.41	0.21	0.60	0.58	0.36	0.50	0.54	0.41	0.29	0.53	0.52	0.37	0	0.31	0.97
Depot	0.39	0.28	0.69	0.44	0.76	0.32	0.11	0.64	0.73	0.54	0.26	0.62	0.22	0.32	0.72	0.70	0.09	0.31	0	1.21
Client	1.04	1.41	1.36	1.36	1.32	1.24	1.10	1.31	1.29	1.06	1.39	1.25	1.32	1.19	1.02	1.04	1.26	0.96	1.20	0

Table A.3.10: Travel time matrix for instance 4, Leuven area: travel times between origin (row) and destination (column) points in hours. Calculated for a heavy goods vehicle without real-time travel information. Obtained using OpenRouteService.

from (row) / to (column)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	cl.0	cl.1	depot
Begijnendijk	0.00	0.56	0.62	0.54	0.59	0.41	0.45	0.32	0.33	0.62	0.38	0.50	0.61	0.50	0.68	0.23	0.39	0.20	0.56	0.54	0.46
Bertem (+huldenberg)	0.55	0.00	0.35	0.52	0.41	0.42	0.26	0.46	0.61	0.19	0.28	0.32	0.22	0.50	0.22	0.43	0.56	0.48	0.00	0.52	0.47
Bierbeek	0.66	0.37	0.00	0.79	0.24	0.58	0.40	0.35	0.71	0.53	0.33	0.22	0.16	0.24	0.20	0.55	0.53	0.63	0.37	0.79	0.67
Boortmeerbeek	0.54	0.52	0.75	0.00	0.89	0.27	0.45	0.61	0.28	0.42	0.48	0.61	0.71	0.79	0.73	0.48	0.76	0.40	0.52	0.00	0.19
Boutersem	0.59	0.42	0.23	0.90	0.00	0.69	0.51	0.37	0.81	0.58	0.43	0.32	0.29	0.21	0.32	0.57	0.39	0.72	0.42	0.90	0.78
Haacht	0.40	0.42	0.54	0.27	0.68	0.00	0.23	0.47	0.23	0.38	0.27	0.40	0.50	0.57	0.55	0.33	0.61	0.25	0.42	0.27	0.15
Herent	0.45	0.25	0.36	0.45	0.50	0.23	0.00	0.37	0.42	0.26	0.18	0.22	0.33	0.40	0.38	0.31	0.47	0.35	0.25	0.45	0.31
Holsbeek	0.32	0.49	0.31	0.60	0.37	0.46	0.38	0.00	0.50	0.55	0.31	0.24	0.42	0.22	0.47	0.20	0.33	0.35	0.49	0.60	0.52
Keerbergen	0.33	0.61	0.67	0.29	0.82	0.22	0.42	0.51	0.00	0.57	0.40	0.53	0.64	0.71	0.70	0.37	0.65	0.21	0.61	0.29	0.24
Kortenberg	0.63	0.19	0.53	0.42	0.59	0.38	0.26	0.54	0.58	0.00	0.36	0.40	0.40	0.58	0.40	0.51	0.64	0.57	0.19	0.42	0.37
Leuven_Aarschotsesteenweg	0.38	0.28	0.29	0.48	0.43	0.27	0.17	0.30	0.40	0.34	0.00	0.15	0.26	0.33	0.32	0.26	0.41	0.32	0.28	0.48	0.36
Leuven_Diestsesteenweg	0.50	0.33	0.16	0.61	0.31	0.40	0.22	0.24	0.52	0.40	0.15	0.00	0.21	0.19	0.27	0.38	0.41	0.44	0.33	0.61	0.49
Leuven_Grauwmeer	0.62	0.23	0.15	0.72	0.32	0.51	0.33	0.22	0.64	0.39	0.26	0.24	0.00	0.33	0.11	0.50	0.60	0.56	0.23	0.72	0.60
Lubbeek	0.51	0.50	0.22	0.80	0.20	0.59	0.41	0.22	0.71	0.59	0.33	0.20	0.33	0.00	0.38	0.42	0.35	0.57	0.50	0.80	0.68
Oud-Heverlee	0.67	0.26	0.19	0.75	0.32	0.56	0.38	0.49	0.71	0.42	0.33	0.31	0.11	0.38	0.00	0.55	0.67	0.61	0.26	0.75	0.67
Rotselaar	0.23	0.44	0.51	0.47	0.57	0.34	0.31	0.20	0.37	0.50	0.26	0.38	0.49	0.42	0.56	0.00	0.44	0.22	0.44	0.47	0.39
Tielt-Winge	0.38	0.59	0.49	0.76	0.39	0.62	0.48	0.33	0.65	0.66	0.41	0.42	0.59	0.35	0.64	0.43	0.00	0.51	0.59	0.7	

Table A.3.11: Travel time matrix for instance 5, Tienen area: travel times between origin (row) and destination (column) points in hours. Calculated for a heavy goods vehicle without real-time travel information. Obtained using OpenRouteService.

from (row) /	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	cl.0	cl.1	depot
Bekkevoort	0.00	0.61	0.48	0.33	0.29	0.59	0.40	0.25	0.74	0.56	0.45	0.30	0.19	0.51	0.56	0.00	0.44	0.69
Bierbeek	0.64	0.00	0.24	0.81	0.46	0.47	0.35	0.73	0.74	0.69	0.34	0.79	0.53	0.51	0.84	0.64	0.33	0.67
Boutersem	0.48	0.23	0.00	0.60	0.23	0.36	0.37	0.51	0.60	0.53	0.21	0.65	0.39	0.34	0.64	0.48	0.43	0.78
Geetbets	0.33	0.77	0.60	0.00	0.39	0.61	0.69	0.11	0.54	0.34	0.58	0.58	0.47	0.54	0.27	0.33	0.75	1.01
Glabbek	0.29	0.45	0.23	0.39	0.00	0.37	0.43	0.30	0.54	0.42	0.27	0.49	0.25	0.32	0.43	0.29	0.59	0.89
Hoegaarden	0.60	0.47	0.35	0.63	0.40	0.00	0.64	0.57	0.43	0.37	0.47	0.83	0.62	0.18	0.52	0.60	0.60	0.93
Holsbeek	0.55	0.61	0.00	0.37	0.69	0.44	0.00	0.82	0.75	0.22	0.54	0.33	0.29	0.84	0.40	0.31	0.52	0.31
Kortenaken	0.25	0.69	0.51	0.11	0.30	0.56	0.61	0.00	0.57	0.36	0.50	0.51	0.39	0.48	0.37	0.25	0.67	0.93
Landen	0.74	0.74	0.59	0.55	0.54	0.43	0.81	0.56	0.00	0.23	0.65	0.96	0.76	0.30	0.32	0.74	0.86	1.19
Linter	0.56	0.70	0.53	0.34	0.42	0.38	0.75	0.36	0.23	0.00	0.59	0.79	0.63	0.24	0.20	0.56	0.82	1.15
Lubbeek	0.45	0.22	0.20	0.58	0.27	0.47	0.22	0.50	0.65	0.58	0.00	0.62	0.35	0.42	0.67	0.45	0.33	0.68
Scherpenheuvel-Zichem	0.30	0.76	0.65	0.56	0.49	0.81	0.55	0.11	0.96	0.78	0.61	0.00	0.32	0.73	0.79	0.30	0.59	0.84
Tielt-Winge	0.19	0.49	0.39	0.47	0.25	0.59	0.33	0.39	0.76	0.63	0.35	0.31	0.00	0.53	0.63	0.19	0.41	0.67
Tienen	0.51	0.49	0.33	0.53	0.31	0.18	0.59	0.48	0.30	0.23	0.42	0.74	0.54	0.00	0.39	0.51	0.62	0.95
Zoutleeuw	0.57	0.82	0.63	0.27	0.43	0.53	0.83	0.36	0.32	0.20	0.67	0.79	0.63	0.40	0.00	0.57	0.95	1.21
client0 (1)	0.00	0.61	0.48	0.33	0.29	0.59	0.40	0.25	0.74	0.56	0.45	0.30	0.19	0.51	0.56	0.00	0.44	0.69
client1	0.46	0.29	0.43	0.75	0.59	0.61	0.30	0.67	0.88	0.83	0.33	0.60	0.41	0.64	0.95	0.46	0.00	0.36
Depot	0.72	0.63	0.78	1.00	0.89	0.95	0.52	0.92	1.22	1.18	0.67	0.86	0.66	0.99	1.20	0.72	0.36	0.00

Table A.3.12: Travel time matrix for instance 6, Eastern Flemish Brabant area: travel times between origin (row) and destination (column) points in hours. Calculated for a heavy goods vehicle without real-time travel information. Obtained using OpenRouteService.

from (row) /	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	cl.0	cl.1	depot
Begijnendijk	0.00	0.44	0.56	0.62	0.54	0.59	0.73	0.59	0.41	0.45	0.80	0.32	0.33	0.65	0.62	0.97	0.38	0.50	0.61	0.91	0.50	0.68	0.44	0.38	0.46
Bekkevoort	0.41	0.00	0.61	0.61	0.78	0.48	0.33	0.29	0.64	0.51	0.59	0.40	0.68	0.25	0.68	0.74	0.44	0.54	0.67	0.56	0.45	0.73	0.00	0.44	0.69
Bertem	0.55	0.61	0.00	0.35	0.52	0.41	0.90	0.63	0.42	0.26	0.50	0.46	0.61	0.82	0.19	0.77	0.28	0.32	0.22	0.73	0.50	0.22	0.61	0.28	0.47
Bierbeek	0.66	0.64	0.37	0.00	0.79	0.24	0.81	0.46	0.58	0.40	0.47	0.35	0.71	0.73	0.53	0.74	0.33	0.22	0.16	0.69	0.24	0.20	0.64	0.33	0.67
Boortmeerbeek	0.54	0.81	0.52	0.75	0.00	0.89	1.10	0.98	0.27	0.45	1.01	0.61	0.28	1.02	0.42	1.28	0.48	0.61	0.71	1.24	0.79	0.73	0.81	0.48	0.19
Boutersem	0.59	0.48	0.42	0.23	0.90	0.00	0.60	0.23	0.69	0.51	0.36	0.37	0.81	0.51	0.58	0.60	0.43	0.32	0.29	0.53	0.21	0.32	0.48	0.43	0.78
Geetbets	0.72	0.33	0.93	0.77	1.09	0.60	0.00	0.39	0.96	0.61	0.69	0.99	0.11	0.99	0.54	0.75	0.70	0.85	0.34	0.58	0.88	0.33	0.75	1.01	0.67
Glabbek	0.60	0.29	0.64	0.45	0.97	0.23	0.39	0.00	0.84	0.66	0.37	0.43	0.86	0.30	0.80	0.54	0.59	0.45	0.51	0.42	0.27	0.54	0.29	0.59	0.89
Haacht	0.40	0.66	0.42	0.54	0.27	0.68	0.95	0.83	0.00	0.23	0.83	0.47	0.23	0.83	1.10	0.27	0.40	0.50	1.06	0.57	0.55	0.66	0.27	0.15	0.19
Heret	0.45	0.52	0.25	0.36	0.45	0.50	0.81	0.66	0.23	0.00	0.66	0.37	0.42	0.73	0.26	0.93	0.18	0.22	0.33	0.88	0.40	0.38	0.52	0.18	0.31
Hoegaarden	0.83	0.60	0.52	0.47	1.01	0.35	0.63	0.40	0.82	0.64	0.00	0.64	0.98	0.57	0.68	0.43	0.60	0.57	0.39	0.37	0.47	0.42	0.60	0.60	0.93
Holsbeek	0.32	0.40	0.49	0.31	0.60	0.37	0.69	0.44	0.46	0.38	0.64	0.00	0.50	0.61	0.55	0.82	0.51	0.24	0.42	0.75	0.22	0.47	0.40	0.31	0.52
Keerbergen	0.33	0.70	0.61	0.67	0.29	0.82	0.99	0.86	0.22	0.42	0.99	0.51	0.00	0.91	0.57	1.24	0.40	0.53	0.64	1.18	0.71	0.70	0.70	0.40	0.24
Kortenaken	0.64	0.25	0.85	0.69	1.01	0.51	0.11	0.30	0.88	0.74	0.56	0.61	0.91	0.00	0.91	0.57	0.67	0.62	0.78	0.36	0.50	0.81	0.25	0.67	0.93
Kortenak	0.63	0.69	0.19	0.53	0.42	0.59	0.98	0.81	0.38	0.26	0.68	0.54	0.58	0.00	0.95	0.36	0.40	0.40	0.90	0.58	0.40	0.69	0.36	0.37	0.37
Landen	0.98	0.74	0.78	0.74	1.27	0.59	0.55	0.54	1.08	0.91	0.43	0.81	1.24	0.56	0.94	0.00	0.86	0.83	0.65	0.68	0.74	0.86	1.19	0.86	1.19
Leuven_Aarschotsesteenweg	0.38	0.46	0.28	0.29	0.48	0.43	0.75	0.59	0.27	0.17	0.61	0.30	0.40	0.67	0.34	0.88	0.00	0.15	0.26	0.83	0.33	0.32	0.46	0.00	0.36
Leuven_Diestsesteenweg	0.50	0.53	0.33	0.16	0.61	0.31	0.70	0.45	0.40	0.22	0.56	0.24	0.52	0.62	0.40	0.83	0.15	0.00	0.21	0.76	0.19	0.27	0.53	0.15	0.49
Leuven_Grauwmeer	0.62	0.69	0.23	0.15	0.72	0.32	0.88	0.54	0.51	0.33	0.41	0.42	0.64	0.80	0.39	0.68	0.26	0.24	0.00	0.63	0.33	0.11	0.69	0.26	0.60
Linter	0.92	0.56	0.74	0.70	1.23	0.53	0.34	0.42	1.04	0.86	0.38	0.75	1.18	0.36	0.90	0.23	0.82	0.77	0.61	0.00	0.59	0.64	0.56	0.82	1.15
Lubbeek	0.51	0.45	0.50	0.22	0.80	0.20	0.58	0.27	0.59	0.41	0.47	0.22	0.71	0.50	0.59	0.65	0.33	0.20	0.33	0.58	0.00	0.38	0.45	0.33	0.68
Oud-Heverlee	0.67	0.73	0.26	0.19	0.75	0.32	0.90	0.54	0.56	0.38	0.41	0.49	0.71	0.82	0.42	0.68	0.33	0.31	0.11	0.64	0.38	0.00	0.73	0.33	0.67
client0 (2)	0.41	0.00	0.61	0.61	0.78	0.48	0.33	0.29	0.64	0.51	0.59	0.40	0.68	0.25	0.68	0.74	0.44	0.54	0.67	0.56	0.45	0.73	0.00	0.44	0.69
client1 (17)	0.38	0.46	0.28	0.29	0.48	0.43	0.75	0.59	0.27	0.17	0.61	0.30	0.40	0.67	0.34	0.88	0.00	0.15	0.26	0.83	0.33	0.32	0.46	0.00	0.36
Depot	0.46	0.72	0.49	0.63	0.21	0.78	1.00	0.89	0.15	0.33	0.95	0.52	0.25	0.92	0.38	1.22	0.36	0.49	0.60	1.18	0.67	0.66	0.72	0.36	0.00

4. Site data

Table A.3.13: Characteristics of the bulky waste (B...0, B...1, B...2 and B...3) and PVC (P...0, P...1, P...2 and P...3) instances. TDP = time to drive from the depot to a site, TPD = time to drive from a site to the depot, TCP = time to drive from the client to a site, TPC = time to drive from a site to the client, CAP^{con} = capacity of an individual container, $nbCont$ = number of containers installed at a site, CAP^{tot} = total site capacity (equals $CAP^{con} \cdot nbCont$).

id	name	Instance 1: bulky waste					Instance 2: PVC					nbCont	CAP^{tot} [m ³]
		TDP TCP [h]	TPD TPC [h]	CAP^{con} [m ³]	nbCont	CAP^{tot} [m ³]	TDP [h]	TPD [h]	TCP [h]	TPC [h]	CAP^{con} [m ³]		
1	Aalter	0.38	0.38	40	2	80	0.38	0.38	0.87	0.83	12	1	12
2	Assenede	0.27	0.27	40	2	80	0.27	0.27	1.16	1.18	12	1	12
3	De Pinte	0.72	0.75	30	2	60	0.72	0.75	1.04	1.09	-	-	-
4	Evergem	0.45	0.46	30	3	90	0.45	0.46	1.14	1.14	12	1	12
5	Gavere	0.79	0.80	30	2	60	0.79	0.80	1.12	1.07	12	1	12
6	Lovendegem	0.37	0.40	30	2	60	0.37	0.40	1.06	1.02	12	1	12
7	Maldegem	0.12	0.13	40	3	120	0.12	0.13	0.93	0.93	12	1	12
8	Merelbeke	0.70	0.70	30	2	60	0.70	0.70	1.03	1.09	12	1	12
9	Nazareth	0.75	0.79	40	2	80	0.75	0.79	1.00	1.03	12	1	12
10	Nevele	0.56	0.58	30	2	60	0.56	0.58	0.84	0.86	12	1	12
11	Sint-Laureins	0.19	0.18	40	2	80	0.19	0.18	1.15	1.16	12	1	12
12	Sint-M.-Latem	0.67	0.69	40	2	80	0.67	0.69	0.98	1.00	12	1	12
13	Waarschoot	0.29	0.30	40	1	40	0.29	0.30	1.12	1.12	12	1	12
14	Zomergem	0.39	0.39	40	2	80	0.39	0.39	1.01	1.01	12	1	12
15	Zulte	0.70	0.77	40	2	80	0.70	0.77	0.97	0.98	12	1	12
16	Deinze	0.67	0.74	30	2	60	0.67	0.74	1.03	1.04	12	1	12
17	Eeklo	0.11	0.11	40	2	80	0.11	0.13	1.06	1.04	12	1	12
18	Knesselare	0.29	0.30	-	-	-	0.29	0.30	0.79				

Table A.3.14: Characteristics of the bulky waste (B...4). For the travel times, we refer to Table A.3.9. CAP^{con} = capacity of an individual container, nbCont = number of containers installed at a site, CAP^{tot} = total site capacity (equals $CAP^{con} \cdot nbCont$).

id	name	CAP^{con} [m ³]	nbCont [-]	CAP^{tot} [m ³]
1	Begijnendijk	30	1	30
2	Bertem (+huldenberg)	40	2	80
3	Bierbeek	30	1	30
4	Doortmeerbeek	30	1	30
5	Boutersem	30	1	30
6	Haacht	40	2	80
7	Herent	40	2	80
8	Holsbeek	30	1	30
9	Keerbergen	40	1	40
10	Kortenber	40	2	80
11	Leuven_Aarschotsesteenweg	40	3	120
12	Leuven_Diestsesteenweg	40	3	120
13	Leuven_Grauwmeer	40	3	120
14	Lubbeek	40	2	80
15	Oud-Heverlee	30	1	30
16	Rotselaar	40	2	80
17	Tielt-Winge	30	1	30
18	Tremelo	40	2	80

Table A.3.15: Characteristics of the bulky waste (B...5) and PVC (P...5) instances. For the travel times, we refer to Table A.3.10. CAP^{con} = capacity of an individual container, nbCont = number of containers installed at a site, CAP^{tot} = total site capacity (equals $CAP^{con} \cdot nbCont$).

id	name	bulky waste			PVC		
		CAP^{con} [m ³]	nbCont [-]	CAP^{tot} [m ³]	CAP^{con} [m ³]	nbCont [-]	CAP^{tot} [m ³]
1	Bekkevoort	30	1	30	12	1	12
2	Bierbeek	30	1	30	12	1	12
3	Boutersem	30	1	30	12	1	12
4	Geetbets	30	1	30	12	1	12
5	Glabbeek	30	1	30	12	1	12
6	Hoegaarden	40	1	40	12	1	12
7	Holsbeek	30	1	30	12	1	12
8	Kortenaken	40	1	40	12	1	12
9	Landen	30	2	60	12	1	12
10	Linter	30	1	30	12	1	12
11	Lubbeek	30	1	30	12	1	12
12	Scherpenheuvel-Zichem	40	2	80	12	1	12
13	Tielt-Winge	30	1	30	12	1	12
14	Tienen	40	3	120	12	1	12
15	Zoutleeuw	40	1	40	12	1	12

Table A.3.16: Characteristics of the bulky waste (B...6). For the travel times, we refer to Table A.3.11. CAP^{con} = capacity of an individual container, nbCont = number of containers installed at a site, CAP^{tot} = total site capacity (equals $CAP^{con} \cdot nbCont$).

id	name	CAP^{con} [m ³]	nbCont [-]	CAP^{tot} [m ³]
1	Begijnendijk	40	1	40
2	Bekkevoort	30	1	30
3	Bertem	40	2	80
4	Bierbeek	30	1	30
5	Doortmeerbeek	30	1	30
6	Boutersem	30	1	30
7	Geetbets	30	1	30
8	Glabbeek	30	1	30
9	Haacht	40	1	40
10	Herent	40	2	80
11	Hoegaarden	40	1	40
12	Holsbeek	30	1	30
13	Keerbergen	30	1	30
14	Kortenaken	40	1	40
15	Kortenber	40	2	80
16	Landen	30	2	60
17	Leuven_Aarschotsesteenweg	40	3	120
18	Leuven_Diestsesteenweg	40	3	120
19	Leuven_Grauwmeer	40	3	120
20	Linter	30	1	30
21	Lubbeek	30	1	30
22	Oud-Heverlee	30	1	30