

Appendix II: Node values of the Cityports

The node values of the cityports express the accessibility of the place. It is the sum of the number of connections by modes of transportation plus the sum of the number of directions. The modes of transportation are airplanes, high-speed trains, intercity trains, regional and local trains, subways, and car access to a nearby highway. Because of the distances between the cityports, buses and bicycles are not included in the calculations.

Table A.II below shows the conversion of the different names for the mode of transportation in the different case studies. Furthermore, column 5 shows the points for connections. The highest value is given to direct airplane access and high-speed train stations, while the lowest scores are given to underground stations. Because of the wider impact of the airport and high-speed train stations in the city-region, these modes of transportation are furthermore differentiated in travelling time to the station.

Table A.II Modes of transportation: conversion and points

Mode	Randstad	Frankfurt Rhein-Main	Tokyo Metropolitan Area	Connection Points	Directions Points
Airport	Schiphol	Frankfurt	Haneda Narita	200 at airport 150 within 30 mins. 100 within 60 mins. 50 within 90 mins. 25 over 90 mins.	1
High-speed trains HSL		ICE	Shinkansen	150 at sta. 100 near sta.	15
Intercity trains	Eurocity (EC) Intercity (IC)	Eurocity (EC) Intercity (IC)		50	10
Regional-local trains	Sneltrain Sprinter	Regional Express (RE) Direkt (D) Regionalbahn (R)	Rapid express Rapid Local	25	5
Light rail and underground	Sneltram Light rail Metro	S-bahn (S) U-Bahn (U)	Underground	5	1
Highway	Snelweg	Bundesbahn	Expressway	50	10

An example:

Rotterdam centre connections

Access to the airport is within 60 minutes = 100 points

No ICE connection yet

IC and EC trains = 50 points

Regional and local trains = 25 points

Subway	= 5 points
No direct highway access near centre	
<i>Rotterdam centre directions</i>	
Schiphol airport with 100 destinations	= 100 points
No ICE direction yet	
Intercity trains in 7 different directions	= 70 points
Local trains in 5 different directions	= 25 points
Subway in 4 different directions	= 4 points
No direct highway access near centre	
<i>Total node value of Rotterdam centre</i>	<i>= 379 points</i>

Sources: <http://www.ns.nl>, <http://www.ov9292.nl>, <http://www.michelin.com>, <http://www.bahn.de>, <http://www.rmv.de>, <http://www.adac.de>, <http://www.jr.co.jp>, <http://www.jorudan.co.jp>, Tokyo Metropolitan Atlas, Stadtplan Frankfurt Rhein-Main

Table A.II.A Randstad

Randstad-Cityport	Connections				Directions				Total Value		
	Airport	ICE	IC/EC	D/RE/R S/U	Highway	Airport	ICE	IC/EC	D/RE/R S/U	Highway	Connections + Directions
Rotterdam, centre	100		50	25	5	100		70	25	4	379
Den Haag, Pr.Clausplein	150					100				40	340
Den Haag, centre	100		50	25	5	100		70	20	1	431
Amsterdam, centre	150		50	25	5	100		80	40	3	453
Utrecht, centre	100		50	25	5	100		100	45	2	427
Utrecht,	100					100				50	300
Rijnsweerd/Uithof											
Amsterdam,	150		50	25	5	100		60	15	2	487
ArenA/Duivendrecht											
Amsterdam, Sloterdijk/Harbour	150		50	25	5	100		20	15	1	446
Schiphol, centre	200		50	25		100		60	20		535
Hoofddorp, Beukenhorst	150					100			15		370
Zoetermeer, centre	100					100			15		310
Den Haag, Binckhorst	100					100			10		235
Den Haag, south-west	100					100				20	270
Amsterdam, Zuidas	150		50	25	5	100		40	10	4	474
Amersfoort, centre	100		50	25		100		60	20		445
Leiden, centre/hospital	150		50	25		100		40	25		460
Aalsmeer, flower auction	150					100					250
Rotterdam, Leuvehaven	100				5	100				2	207
Rotterdam, Europoort	50				5	100				2	237
Westland/Honselersdijk	50					100					150
Horticulture											
Delft, Campus university	50			25		100			10		255
Nieuwegein	50				5	100				1	246
Capelle/Alexandrium	50		50	25	5	100		20	10	1	341

Table A.II.B Frankfurt Rhein-Main

Rhein-Main-Cityport	Connections				Directions				Total Value				
	Airport	ICE	IC/EC	D/RE/R S/U	Highway	Airport	ICE	IC/EC	D/RE/R S/U	Highway	Connections +Directions		
Frankfurt City	150	100	50	25	3	50	116	210	90	60	20	30	904
Airport/Niederrad/Kelsterbach	200	100	50	25	3	50	116	150	30	10	4	40	778
Frankfurt City-West	150	50			3	50	116				8	30	407
Frankfurt City-Ost	150			25	3	50	116			10	17	10	381
Frankfurt Höchst	150			25	3		116			30	4		328
Ruesselsheim	150			25	3	50	116			10	4	30	388
Frankfurt Süd	150	100		25	3	50	116	30		25	9	20	478
Offenbach	150			25	3	50	116			25	8	20	397
Kaiserlei Offenbach	150		50		3	50	116				8	40	417
Neu-Isenburg	150			25	3	50	116			10	4	20	378
Dreieich	150			25			116			10	4		305
Langen (Hessen)	150			25	3	50	116			10	4	20	378
Dietzenbach	100				3		116				2		221
Wiesbaden, centre	150	100	50	25	3	50	116	30	10	25	3	40	602
Eschborn	150				3	50	116				4	40	363
Hofheim am Taunus	150			25	3	50	116			10	2	20	376
Swalbach -Sulzbach	150			25	3	50	116			10	2	20	376
Frankfurt Riedberg	150				3	50	116				3	40	362
Darmstadt,centre	150	100		25	3	50	116	60	60	30	2	40	636
Dieburg	100			25			116			15			256
Griesheim	50					50	116					20	236
Bad Homburg	150			25	3	50	116			5	1	30	380
Hanau	100	100	50	25	3	50	116	60		45	2	30	581
Bad Vilbel	50			25	3	50	116			5	2	10	261
Karben	100						116						216
Mainz Mediaviertel	150	100	50	25	3	50	116	60	80		2	40	676
Aschaffenburg, centre	100	100	50	25		50	116	30	30			20	521

Table A.II.C Tokyo Metropolitan Area

Tokyo-Cityport	Connections			Directions					Total Value Connections +Directions						
	Narita	Haneda	ICE	IC/EC	D/RE/R S/U	Highway	Haneda	Narita		ICE	IC/EC	D/RE/R S/U	Highway		
Tokyo/Maranouchi	100	150	100	50	25	5	50	44	67	90	40	40	2	10	773
Kojimachi	50	100	100	50	25	5	50	44	67	90	20	10	6	40	657
Kanda-Otemachi	50	150	100	50	25	5	50	44	67	90	10	20	6	20	687
Nihonbashi	50	100	50	50	25	5	50	44	67	90	20	8	8	20	529
Ginza	50	150	50	50	25	5	50	44	67	90	10	20	10	20	536
Shimbashi/ Toronomon	50	150	50	50	25	5	50	44	67	90	10	7	7	20	568
Azabu/ Roppongi Hills	50	150				5	50	44	67			6	6	30	402
Mid-town/Akasaka	50	100				5	50	44	67			4	4	20	340
Shinagawa Intercity	50	150	100	50	25	5	50	44	67	20	30	20	2	2	563
Shinjuku	50	100		50	25	5	50	44	67		70	50	9	10	530
Ushigome	50	100				5	50	44	67			2	2	2	268
Shibuya	50	100			25	5	50	44	67			25	5	20	391
Ebisu	50	100			25	5	50	44	67			30	2	2	323
Yotsuya	50	100		50	25	5	50	44	67		20	10	4	4	375
Ota-Kamata	50	200			25	5	50	44	67			35	10	5	421
Meguro	50	150			25	5	50	44	67			10	5	20	426
Osaki	50	150	50		25	5	50	44	67	20		35	8	20	441
Ikebukuro	50	100		50	25	5	50	44	67			20	8	20	439
Ueno	100	150	100	50	25	5	50	44	67	10	40	30	4	20	695
Akihabara	50	150	50	50	25	5	50	44	67	10	20	2	2	10	483
Asakusa	50	100	50			5	50	44	67	10		3	3	20	399
Iidabashi/ Tokyo Dome	50	100			25	5	50	44	67			10	6	20	377
Hongo	50	100				5	50	44	67				6		272
Hachioji	25	50		50	25	5	50	44	67		50	25	15	2	336
Tachikawa	25	50		50	25	5	50	44	67		20	15	2		303

(Table A.II.C. continued)

Tokyo-Cityport	Connections			Directions					Total Value Connections +Directions				
	Narita	Haneda	ICE	IC/EC	D/RE/R S/U	Highway	Haneda	Narita		ICE	IC/EC	D/RE/R S/U	Highway
Funabashi	100	100		50	25	50	44	67		20	25	20	501
Makuhari	100	100		50	25	50	44	67		20	10	20	486
Narita	200	50		50	25	50	44	67		20	20	20	546
Chiba	100	100		50	25	50	44	67		30	40	20	526
Urawa	50	100	50	50	25	50	44	67	40	40	20	20	556
Omiya	25	50	100	50	25	50	44	67	40	70	35	10	566
Yokohama- MinatoMirai	50	100		50	25	50	44	67		20	10	20	443
Kawasaki, centre	25	150			25	50	44	67			2	20	383
Tsukuba	100	25			50	50	44	67		20		20	376
Urayasu Disneyland	25	50			25	5	44	67		10	1	20	297
Waterfront Teleport	25	150			25	5	44	67		10	1	30	407