

This document provides the parameters of 16-node transportation network and traffic flows in the 6 operating scenarios (i.e. scenarios A ~ F) presented in the main paper. Table 1 presents the 16-node transportation network parameters

Table 1. Transportation Network Parameters

Edge	Starting node	Terminal node	Capacity ( $\rho_l$ )	Length (meter)
L1	N1	N2	998	19
L2	N2	N1	998	19
L3	N2	N3	1128	20
L4	N3	N2	1128	20
L5	N3	N4	1056	23
L6	N4	N3	1056	23
L7	N1	N5	976	17
L8	N5	N1	976	17
L9	N2	N6	1556	20
L10	N6	N2	1556	20
L11	N3	N7	1428	21
L12	N7	N3	1428	21
L13	N3	N8	1875	25
L14	N8	N3	1875	25
L15	N4	N8	1123	22
L16	N8	N4	1123	22
L17	N5	N6	1468	20
L18	N6	N5	1468	20
L19	N6	N7	1612	20
L20	N7	N6	1612	20
L21	N7	N8	1521	22
L22	N8	N7	1521	22
L23	N5	N9	1205	24
L24	N9	N5	1205	24
L25	N5	N10	1924	29
L26	N10	N5	1924	29
L27	N6	N10	1665	23
L28	N10	N6	1665	23
L29	N7	N10	1954	29
L30	N10	N7	1954	29
L31	N7	N11	1452	25
L32	N11	N7	1452	25
L33	N8	N11	2013	31
L34	N11	N8	2013	31
L35	N8	N12	1486	24
L36	N12	N8	1486	24
L37	N4	N16	1025	46
L38	N16	N4	1025	46

L39	N9	N10	1569	20
L40	N10	N9	1569	20
L41	N10	N11	1405	20
L42	N11	N10	1405	20
L43	N11	N12	1725	22
L44	N12	N11	1725	22
L45	N9	N13	1124	19
L46	N13	N9	1124	19
L47	N10	N14	1621	20
L48	N14	N10	1621	20
L49	N11	N15	1624	19
L50	N15	N11	1624	19
L51	N11	N16	2125	34
L52	N16	N11	2125	34
L53	N12	N16	1024	23
L54	N16	N12	1024	23
L55	N13	N14	1504	21
L56	N14	N13	1504	21
L57	N14	N15	1489	22
L58	N15	N14	1489	22
L59	N15	N16	1648	31
L60	N16	N15	1648	31

Table 2 presents the traffic flows within the 16-node transportation network in the 6 operating scenarios (i.e. scenarios A ~ F) in the main paper.

Table 2. Traffic Flows ( $V_{l,i}$ ) in the 6 Operating Scenarios

Scenario A	L1	L2	L3	L4	L5	L6	L7	L8	L9
	886	886	1025	1025	998	998	786	786	1200
	L10	L11	L12	L13	L14	L15	L16	L17	L18
	1200	1100	1100	1564	1564	1025	1025	1248	1248
	L19	L20	L21	L22	L23	L24	L25	L26	L27
	1410	1410	1168	1168	953	953	1678	1678	1356
	L28	L29	L30	L31	L32	L33	L34	L35	L36
	1356	1785	1785	1185	1185	1875	1875	1278	1278
	L37	L38	L39	L40	L41	L42	L43	L44	L45
	842	842	1269	1269	1121	1121	1532	1532	1023
	L46	L47	L48	L49	L50	L51	L52	L53	L54
	1023	1458	1458	1498	1498	1852	1852	888	888
	L55	L56	L57	L58	L59	L60			
	1368	1368	1268	1268	1589	1589			
Scenario B	L1	L2	L3	L4	L5	L6	L7	L8	L9
	869	869	1036	1036	986	986	889	889	1345
	L10	L11	L12	L13	L14	L15	L16	L17	L18

	1345	1258	1258	1798	1798	1025	1025	1269	1269
	L19	L20	L21	L22	L23	L24	L25	L26	L27
	1528	1528	1358	1358	1111	1111	1846	1846	1589
	L28	L29	L30	L31	L32	L33	L34	L35	L36
	1589	1846	1846	1325	1325	1998	1998	1377	1377
	L37	L38	L39	L40	L41	L42	L43	L44	L45
	956	956	1485	1485	1289	1289	1687	1687	1021
	L46	L47	L48	L49	L50	L51	L52	L53	L54
	1021	1588	1588	1522	1522	1825	1825	936	936
	L55	L56	L57	L58	L59	L60			
	1489	1489	1368	1368	1589	1589			
Scenario C	L1	L2	L3	L4	L5	L6	L7	L8	L9
	956	956	1121	1121	1021	1021	945	945	1520
	L10	L11	L12	L13	L14	L15	L16	L17	L18
	1520	1411	1411	1821	1821	1100	1100	1414	1414
	L19	L20	L21	L22	L23	L24	L25	L26	L27
	1600	1600	1500	1500	1119	1119	1859	1859	1620
	L28	L29	L30	L31	L32	L33	L34	L35	L36
	1620	1900	1900	1488	1488	2006	2006	1389	1389
	L37	L38	L39	L40	L41	L42	L43	L44	L45
	999	999	1526	1526	1389	1389	1689	1689	1089
	L46	L47	L48	L49	L50	L51	L52	L53	L54
	1089	1529	1529	1612	1612	2069	2069	1001	1001
	L55	L56	L57	L58	L59	L60			
	1489	1489	1423	1423	1624	1624			
Scenario D	L1	L2	L3	L4	L5	L6	L7	L8	L9
	969	969	1039	1039	1026	1026	929	929	1502
	L10	L11	L12	L13	L14	L15	L16	L17	L18
	1502	1413	1413	1806	1806	1067	1067	1431	1431
	L19	L20	L21	L22	L23	L24	L25	L26	L27
	1596	1596	1486	1486	1168	1168	1849	1849	1625
	L28	L29	L30	L31	L32	L33	L34	L35	L36
	1625	1936	1936	1409	1409	1996	1996	1437	1437
	L37	L38	L39	L40	L41	L42	L43	L44	L45
	1003	1003	1496	1496	1396	1396	1702	1702	1038
	L46	L47	L48	L49	L50	L51	L52	L53	L54
	1038	1587	1587	1599	1599	2101	2101	1009	1009
	L55	L56	L57	L58	L59	L60			
	1486	1486	1407	1407	1601	1601			
Scenario E	L1	L2	L3	L4	L5	L6	L7	L8	L9
	963	963	1069	1069	983	983	956	956	1504
	L10	L11	L12	L13	L14	L15	L16	L17	L18
	1504	1405	1405	1862	1862	1102	1102	1423	1423

	L19	L20	L21	L22	L23	L24	L25	L26	L27
	1599	1599	1500	1500	1186	1186	1902	1902	1623
	L28	L29	L30	L31	L32	L33	L34	L35	L36
	1623	1914	1914	1423	1423	1956	1956	1425	1425
	L37	L38	L39	L40	L41	L42	L43	L44	L45
	994	994	1514	1514	1358	1358	1689	1689	969
	L46	L47	L48	L49	L50	L51	L52	L53	L54
	969	1586	1586	1594	1594	2096	2096	978	978
	L55	L56	L57	L58	L59	L60			
	1475	1475	1428	1428	1612	1612			
Scenario F	L1	L2	L3	L4	L5	L6	L7	L8	L9
	934	934	1101	1101	991	991	905	905	1504
	L10	L11	L12	L13	L14	L15	L16	L17	L18
	1504	1389	1389	1788	1788	1089	1089	1411	1411
	L19	L20	L21	L22	L23	L24	L25	L26	L27
	1585	1585	1456	1456	1175	1175	1856	1856	1627
	L28	L29	L30	L31	L32	L33	L34	L35	L36
	1627	1908	1908	1411	1411	1994	1994	1436	1436
	L37	L38	L39	L40	L41	L42	L43	L44	L45
	948	948	1514	1514	1388	1388	1687	1687	1085
	L46	L47	L48	L49	L50	L51	L52	L53	L54
	1085	1564	1564	1524	1524	2056	2056	945	945
	L55	L56	L57	L58	L59	L60			
	1488	1488	1419	1419	1588	1588			