Appendix : Input data for case study conducted on assam flood.
Title of the article: Maximizing Efficiency in Relocating Contagious and Non-contagious Populations: A Model for Cost and Time Minimization.
Journal Name: International Journal of Industrial Engineering: Theory, Applications and Practice.
Authors: Mayank Singh Bhakuni and Amrit Das.

Table 11. Transportation cost of non-contagious population

Transportation cost of non-contagious population travelling from source g to RC s using conveyance q			
	$s = 1$		
g	$q = 1$	$q = 2$	$q = 3$
1	(63,76,89,104,108,115)(76,88,92,104,112,118)(64,72,86,92,117,132);(0.5,0.5,0.6)	(56,68,82,98,111,127)(61,78,84,96,108,122)(72,81,92,107,121,132;(0.6,0.2,0.4)	(101,140,158,169,189,223)(106,140,169,185,192,203)(107,129,138,150,162,188);(0.8,0.3,0.4)
2	(13,19,29,33,38,49)(18,21,28,32,41,47)(10,18,29,31,37,41);(0.8,0.7,0.9)	(58,63,76,87,94,137)(52,65,73,88,91,102)(48,67,71,81,87,98);(0.3,0.5,0.6)	(58,62,75,88,102,114)(61,76,84,97,102,116)(64,78,85,91,98,102);(0.7,0.7,0.9)
3	(49,58,74,88,103,144)(56,64,73,85,97,113)(51,59,76,92,115,135);(0.2,0.7,0.8)	(69,81,95,108,115,129)(61,72,88,108,115,125)(69,76,85,98,115,132);(0.4,0.6,0.8)	(68,76,89,98,109,127)(71,79,94,109,119,135)(78,92,103,112,119,145);(0.6,0.3,0.9)
4	(57,63,79,93,112,137)(69,78,92,105,121,138)(64,79,87,105,121,138);(0.3,0.4,0.6)	(76,85,109,121,148,167)(73,83,94,112,134,158)(81,95,105,112,139,149);(0.5,0.3,0.5)	(89,103,116,138,163,179)(98,112,138,148,158,169)(93,112,134,156,168,171);(0.7,0.7,0.9)
5	(78,85,95,122,135,141)(91,105,123,137,145,158)(92,104,121,135,149,151) ;(0.7,0.5,0.8)	(98,107,113,121,133,148)(95,113,129,145,167,178)(91,109,121,136,149,159);(0.6,0.3,0.2)	(103,114,132,153,168,183)(112,126,136,145,159,168)(93,105,129,147,156,173);(0.5,0.4,0.1)
g	$s = 2$		
1	(84,96,118,139,152,191)(88,102,112,124,136,142)(76,88,96,122,138,156);(0.8,0.4,0.2)	(41,55,78,85,98)(40,48,56,69,77,80))(45,51,63,70,83,90);(0.9,0.8,0.7)	(65,76,91,101,121,138)(68,76,89,105,118,121)(78,91,105,112,127,156);(0.5,0.8,0.4)
2	(98,109,113,138,159,164)(107,127,138,155,170,181)(90,108,121,150,166,189);(0.8,0.1,0.7)	(81,94,102,115,138,117)(80,87,94,104,121,127)(83,95,105,117,136,152);(0.3,0.9,0.7)	(81,94,102,115,138,177)(87,95,106,124,135,141)(91,104,118,132,141,151);(0.6,0.8,0.5)
3	(78,93,109,119,131,143)(82,96,109,124,130,139)(91,104,109,123,134,140);(0.5,0.8,0.7)	(97,110,128,134,156,162)(102,113,125,139,153,168)(107,123,132,149,151, 162);(0.5,0.5,0.5)	(108,113,121,139,154,165)(108,118,135,142,151,175)(112,119,127,142,165,172);(0.9,0.3,0.2)
4	(64,78,86,91,102,127)(72,93,102,125,135,167)(81,98,102,121,135,147) ;(0.3,0.5,0.8)	(72,83,103,123,134,148)(78,85,98,116,129,145)(87,98,103,127,134,148) ;(0.7,0.9,0.7)	(136,158,189,219,246,278)(145,168,189,219,238,256)(116,137,156,178,219,256);(0.9,0.2,0.4)
5	(45,59,72,86,101,109)(59,72,89,98,102,116)(51,59,64,71,85,98);(0.8,0.8,0.9)	(56,65,78,103,135,149)(62,79,98,109,121,138)(78,98,109,117,123,136) ;(0.5,0.6,0.8)	(67,79,83,112,128,138)(67,78,95,102,127,134)(71,79,97,108,114,123);(0.7,0.4,0.7)
g	$s = 3$		
1	(156,164,178,201,220,255)(164,186,196,224,238,271)(158,168,174,198,224,248);(0.6,0.3,0.6)	(138,144,158,176,183,194)(132,144,160,169,183,221))(140,157,178,191,203,216);(0.9,0.2,0.2)	(198,234,267,289,351,364)(223,269,291,320,368,398)(203,238,278,298,318,245);(0.6,0.5,0.6)
2	(115,129,136,143,159,188)(122,138,154,161,178,192)(110,128,134,156,161,189);(0.4,0.5,0.1)	(123,137,149,162,189,228)(131,143,156,171,193,215)(138,145,167,177,189,195) ;(0.5,0.6,0.3)	(132,145,159,178,194,222)(141,158,164,175,188,214)(135,146,171,188,195,204);(0.7,0.5,0.4)

3	(134,146,153,168,179,193)(121,138,149,157,163,179)(128,143,152,167,182,198) ;(0.8,0.1,0.2)	(178,190,211,255,286,300)(145,158,189,222,255,271)(158,169,198,210,245,289) ;(0.6,0.2,0.1)	(158,167,181,197,223,243)(155,164,179,195,213,242)(167,183,198,215,245,256);(0.5,0.5,0.1)
4	(32,38,45,52,87,93)(38,41,67,79,83,91)(38,41,44,51,54,72);(0.6,0.5,0.9)	(51,59,76,89,103,166)(56,61,69,78,83,98)(56,62,78,81,86,93) ;(0.6,0.8,0.7)	(67,73,89,113,128,139)(51,59,68,73,79,93)(63,72,93,112,135,146);(0.9,0.1,0.2)
5	(45,68,81,91,103,116)(51,72,87,99,109,121)(49,67,88,95,108,113);(0.3,0.9,0.6)	(65,73,94,109,129,149)(68,79,99,107,121,135)(71,87,108,117,120,139) ;(0.2,0.6,0.5)	(37,41,49,67,85,93)(34,57,68,71,84,91)(37,45,59,67,81,92) ;(0.6,0.7,0.8)

Table 12. Transportation cost of contagious population

Transportation cost of contagious population travelling from source g to RC s using conveyance m			
	$s = 1$		
g	$m = 1$	$m = 2$	$m = 3$
1	(101,112,145,185,208,232)(106,119,156,171,223,245)(98,105,124,139,148,151);(0.4,0.5,0.8)	(184,210,235,248,261,287)(191,225,248,274,291,302)(197,226,248,268,291,326);(0.8,0.7,0.4)	(154,169,181,201,235,268)(142,160,179,192,221,245)(159,183,212,268,291,302);(0.7,0.9,0.6)
2	(56,61,78,82,110,120)(51,69,78,94,108,128)(56,65,71,81,89,98);(0.2,0.5,0.5)	(67,79,95,101,124,147)(71,92,112,134,143,165)(62,82,97,103,116,125) ;(0.4,0.7,0.8)	(78,96,123,136,153,162)(82,102,123,135,147,156)(91,108,128,135,140,157);(0.6,0.9,0.7)
3	(48,67,84,91,103,120)(51,63,79,93,101,123)(62,78,91,106,121,133) ;(0.5,0.9,0.7)	(76,96,121,135,149,176)(79,93,108,115,121,134)(81,107,121,131,139,156) ;(0.1,0.8,0.9)	(91,103,129,149,167)(104,112,135,148,167,172)(87,102,123,139,159,177);(0.8,0.6,0.5)
4	(78,96,105,113,151,178)(81,98,106,131,167,189)(71,86,106,123,137,151) ;(0.3,0.9,0.6)	(91,125,139,159,189,199)(93,107,121,137,159,178)(89,107,123,137,145,165);(0.5,0.6,0.8)	(107,121,145,152,164,183)(112,134,149,158,180,201)(101,121,145,162,171,188);(0.7,0.4,0.5)
5	(92,108,138,159,171,191)(98,116,129,149,168,182)(105,129,138,154,161,191);(0.3,0.2,0.9)	(114,128,145,162,173)(112,129,136,156,171,193)(123,139,159,168,183,192);(0.5,0.7,0.3)	(139,148,163,207,230,248)(146,153,162,183,198,226)(141,158,169,198,214,231);(0.2,0.5,0.2)
g	$s = 2$		
1	(122,142,162,181,205,219)(122,142,158,169,188,205)(92,98,107,146,153,178);(0.6,0.4,0.1)	(121,145,156,178,201,222)(98,121,156,178,198,214)(97,109,135,152,168,191);(0.6,0.5,0.5)	(134,167,185,213,245,279)(113,138,153,178,208,237)(90,107,137,149,187,217);(0.4,0.8,0.2)
2	(138,148,179,195,239,262)(112,138,151,169,187,214)(131,159,175,193,236,275);(0.3,0.5,0.1)	(82,97,121,145,153,174)(76,81,101,123,146,158)(71,93,101,118,121,138) ;(0.3,0.5,0.5)	(93,108,134,157,173,188)(98,107,124,138,159,173)(83,91,104,123,145,158);(0.5,0.4,0.6)
3	(149,168,191,238,268,280)(120,148,178,196,228,239)(136,168,191,225,248,278) ;(0.7,0.7,0.2)	(109,121,135,148,171,194)(119,134,145,169,175,189)(128,148,159,173,189,195) ;(0.5,0.2,0.6)	(146,162,178,195,233,247)(134,156,172,189,201,234)(134,149,162,198,217,235);(0.7,0.5,0.8)
4	(87,102,121,145,169,180)(83,101,123,134,149,168)(71,86,94,106,123,136) ;(0.4,0.6,0.8)	(82,97,113,121,131,151)(84,103,121,131,139,153)(81,95,101,123,131,141);(0.7,0.5,0.4)	(97,113,135,156,187,205)(91,108,121,145,167,191)(95,115,128,145,163,200);(0.3,0.3,0.6)
5	(68,98,105,121,138,156)(71,89,105,121,138,151)(51,68,71,79,81,95) ;(0.8,0.8,0.4)	(71,105,129,138,161,182)(105,144,160,171,179,185)(106,133,169,170,181,192);(0.7,0.8,0.7)	(78,89,118,132,145,170)(81,93,108,113,131,143)(76,89,95,103,124,143) ;(0.5,0.6,0.8)
g	$s = 3$		
1	(178,198,245,259,281,293)(181,204,245,267,289,345)(156,189,205,227,278,289);(0.4,0.7,0.7)	(178,208,231,243,267,281)(189,197,212,245,289,318)(171,198,231,267,281,292);(0.7,0.6,0.7)	(228,239,298,325,345,367)(198,229,268,279,302,336)(245,268,281,299,329,358);(0.8,0.7,0.4)

2	(112,138,159,182,216,238)(117,129,138,158,181,191)(121,135,149,168,187,196);(0.7,0.6,0.3)	(134,168,187,227,243,267)(129,143,157,169,195,231)(148,161,174,189,235,248) ;(0.9,0.7,0.8)	(159,187,205,225,253,270)(154,167,179,194,217,238)(165,187,203,215,228,234) ;(0.3,0.4,0.5)
3	(142,159,172,198,218,237)(145,162,178,191,207,212)(128,148,169,183,193,201) ;(0.9,0.3,0.5)	(178,199,248,279,315,324)(169,189,225,248,285,335)(178,198,214,245,277,319) ;(0.6,0.2,0.1)	(167,184,203,242,276,293)(161,185,203,245,285,322)(171,190,204,234,259,281);(0.6,0.6,0.7)
4	(65,71,85,91,106,115)(58,78,91,98,114,141)(68,72,85,104,113,119) ;(0.9,0.7,0.7)	(81,96,112,135,156,169)(78,91,104,124,132,151)(79,92,103,116,131,141) ;(0.6,0.9,0.8)	(55,68,71,98,119,145)(68,79,89,96,122,159)(77,82,98,102,150,165);(0.7,0.3,0.5)
5	(68,98,114,121,149,162)(78,89,99,108,121,159)(78,81,101,114,119,139);(0.9,0.1,0.3)	(59,89,109,138,148,159)(65,78,89,98,105,121)(69,88,121,126,134,145);(0.7,0.8,0.6)	(71,86,93,108,115,130)(68,73,89,108,121,138)(77,83,98,121,134,145) ;(0.1,0.3,0.6)

Table 13. Inputs for the transportation time (non-contagious)

Transportation time of non-contagious population travelling from source g to RC s using conveyance q			
	$s = 1$		
g	$q = 1$	$q = 2$	$q = 3$
1	(238,247,284,342,374,401)(241,258,287,326,356,381)(241,253,278,294,356,398);(0.7,0.4,0.8)	(270,290,315,365,388,434)(268,289,315,356,380,395)(234,265,288,312,344,389);(0.8,0.2,0.1)	(114,154,161,178,198,216)(112,134,151,168,179,185)(121,130,149,152,178,181);(0.9,0.7,0.5)
2	(165,215,239,280,325,350)(138,178,196,236,268,290)(128,168,170,198,211,226);(0.1,0.8,0.7)	(103,123,138,151,178,192)(113,135,146,165,174,189)(101,135,144,162,171,185) ;(0.6,0.7,0.3)	(98,102,134,151,168,178)(92,126,142,168,198,225)(103,115,122,136,153,175);(0.8,0.9,0.5)
3	(246,265,291,312,349,371)(245,265,271,296,336,367)(241,266,285,291,322,357);(0.7,0.3,0.6)	(214,232,258,279,311,335)(223,257,285,302,306,331)(221,247,269,288,327,349) ;(0.3,0.2,0.5)	(197,224,256,265,286,295)(211,245,261,274,288,295)(201,235,246,271,287,291);(0.8,0.5,0.4)
4	(246,265,291,312,349,371)(245,265,271,296,336,367)(241,266,285,291,322,357);(0.7,0.3,0.6)	(214,232,258,279,311,335)(223,257,285,302,306,331)(221,247,269,288,327,349) ;(0.3,0.2,0.5)	(197,224,256,265,286,295)(211,245,261,274,288,295)(201,235,246,271,287,291);(0.8,0.5,0.4)
5	(201,239,264,298,318,327)(210,249,261,292,306,335)(222,245,267,299,302,339);(0.4,0.9,0.2)	(195,223,248,268,291,317)(199,229,253,289,306,329)(215,238,259,284,302,311);(0.5,0.7,0.5)	(187,210,236,265,283,303)(178,198,211,247,286,311)(186,200,217,248,279,304);(0.5,0.4,0.8)
g	$s = 2$		
1	(278,294,345,397,428,447)(283,301,331,356,386,409)(289,312,345,389,391,421);(0.4,0.3,0.4)	(271,310,341,352,366,375)(279,312,320,354,362,378)(289,311,345,351,367,381);(0.9,0.4,0.6)	(283,310,369,394,424,448)(312,365,378,391,412,435)(335,350,368,391,421,449);(0.5,0.2,0.1)
2	(98,122,148,179,201,212)(89,109,159,168,178,191)(100,159,185,190,226,249);(0.7,0.5,0.3)	(191,235,278,298,328,345)(198,225,256,289,290,312)(184,215,240,268,298,322);(0.4,0.7,0.1)	(165,195,221,241,298,304)(175,191,213,245,271,301)(168,186,225,269,294,321);(0.3,0.8,0.7)
3	(325,368,389,425,470,497)(356,390,419,470,498,512)(336,380,395,425,459,498);(0.6,0.2,0.5)	(275,289,312,336,351,368)(281,302,347,364,395,416)(275,293,311,336,375,394);(0.7,0.2,0.5)	(268,286,322,342,353,362)(271,298,326,347,352,368)(265,289,315,328,341,354);(0.6,0.4,0.5)
4	(138,167,198,237,248,279)(156,177,198,213,238,259)(145,178,198,219,220,245);(0.6,0.9,0.5)	(208,234,268,298,327,361)(207,245,289,326,389,392)(209,239,253,334,367,380);(0.9,0.2,0.3)	(141,153,211,238,263,283)(141,182,201,223,241,260)(148,151,168,180,234,278);(0.7,0.9,0.5)
5	(176,192,214,236,240,258)(187,196,236,255,267,281)(199,203,236,257,286,298) ;(0.5,0.6,0.8)	(78,95,109,125,158,182)(89,108,129,169,198,226)(112,139,159,179,198,221) ;(0.4,0.9,0.5)	(134,157,189,239,278,286)(131,153,179,216,238,260)(138,161,187,204,220,257);(0.4,0.7,0.9)

g	$s = 3$		
1	(393,408,436,452,478,495)(404,427,445,478,498,515)(401,432,458,487,514,534);(0.9,0.1,0.6)	(387,429,485,548,601,633)(389,415,475,580,608,615)(381,416,498,570,638,645);(0.8,0.3,0.3)	(170,198,274,350,380,407)(189,235,285,345,375,398)(190,210,265,312,345,384);(0.5,0.4,0.1)
2	(321,347,379,399,421,443)(349,378,392,423,456,461)(333,356,385,399,439,476);(0.9,0.3,0.5)	(333,359,386,420,456,468)(312,347,387,412,438,476)(336,357,378,392,411,437);(0.6,0.4,0.3)	(326,341,479,411,453,471)(310,341,366,384,419,441)(312,333,369,386,412,446);(0.8,0.2,0.7)
3	(361,392,412,431,463,480)(365,386,412,435,466,483)(359,378,406,439,465,489) ;(0.9,0.1,0.8)	(175,208,226,245,297,309)(170,185,215,259,286,311)(210,239,268,325,330,345);(0.8,0.6,0.3)	(331,368,402,449,491,509)(344,369,386,414,444,468)(341,375,399,426,465,487);(0.8,0.7,0.4)
4	(95,123,144,162,184,208)(93,111,136,155,176,192)(102,136,168,175,186,197) ;(0.4,0.8,0.9)	(83,106,114,128,152,164)(93,112,125,138,148,169)(81,98,123,131,142,158) ;(0.2,0.6,0.7)	(76,85,91,113,125,137)(71,96,103,109,118,123)(85,98,106,111,128,131);(0.9,0.6,0.8)
5	(53,63,71,78,85,98)(57,72,81,97,101,108)(74,83,95,102,108,118);(0.5,0.8,0.6)	(48,57,62,69,74,90)(52,58,61,69,81,92)(51,59,65,71,79,83) ;(0.9,0.1,0.9)	(55,69,89,102,132,142)(61,75,98,112,121,135)(45,75,81,93,110,132);(0.5,0.5,0.8)

Table 14. Input for the transportation time (contagious)

Transportation time of contagious population travelling from source g to RC s using conveyance q			
	$s = 1$		
g	$m = 1$	$m = 2$	$m = 3$
1	(197,227,249,284,310,325)(192,225,253,274,297,306)(196,221,249,267,291,311);(0.9,0.5,0.6)	(245,260,289,339,345,364)(230,255,261,285,320,368)(269,280,293,329,369,378);(0.5,0.4,0.2)	(183,209,224,249,276,291)(187,203,221,241,267,281)(191,218,231,260,271,288);(0.4,0.3,0.7)
2	(98,122,147,158,173,180)(92,109,131,163,171,183)(102,119,137,153,164,178);(0.5,0.6,0.7)	(91,109,131,162,178,215)(99,112,124,141,157,168)(95,103,116,131,165,183);(0.3,0.4,0.9)	(81,98,102,117,126,143)(86,103,121,134,141,152)(90,112,121,133,144,149);(0.5,0.6,0.6)
3	(197,243,279,293,326,342)(201,221,247,278,290,325)(208,232,254,287,311,334);(0.4,0.2,0.7)	(198,223,259,283,304,331)(203,237,261,280,302,319)(195,215,243,278,294,308) ;(0.5,0.4,0.8)	(187,222,253,298,310,328)(182,198,213,243,269,291)(185,202,240,278,289,321);(0.3,0.9,0.5)
4	(178,195,221,243,274,293)(182,202,231,245,269,293)(173,199,228,249,258,266) ;(0.6,0.6,0.9)	(152,173,189,195,208,227)(157,183,204,217,222,236)(162,189,197,208,217,231);(0.8,0.5,0.7)	(149,163,187,213,245,256)(145,168,191,206,233,243)(150,168,183,204,235,267);(0.1,0.3,0.8)
5	(174,189,201,216,234,244)(182,189,199,213,228,239)(187,201,212,222,238,245);(0.9,0.8,0.1)	(172,186,214,231,253,272)(169,175,203,214,239,241)(204,223,247,269,281,293);(0.6,0.4,0.7)	(148,163,170,195,219,232)(151,166,181,203,211,220)(164,171,182,189,193,207);(0.7,0.3,0.8)
g	$s = 2$		
1	(267,299,332,358,377,393)(271,298,311,328,349,369)(275,301,328,342,369,398);(0.9,0.5,0.9)	(257,273,299,339,362,387)(253,269,297,312,333,347)(261,278,297,321,356,378);(0.6,0.3,0.6)	(237,256,279,295,326,339)(232,249,267,289,310,328)(243,251,277,292,322,353);(0.5,0.6,0.1)
2	(160,185,203,232,248,275)(168,194,211,246,285,304)(179,203,214,238,253,262);(0.7,0.7,0.4)	(158,172,196,231,256,286)(161,174,193,206,230,241)(150,176,198,213,238,256) ;(0.4,0.9,0.3)	(146,163,184,193,201,219)(141,171,189,211,238,253)(138,153,165,182,191,204);(0.9,0.6,0.7)
3	(269,291,312,339,357,371)(261,297,322,340,352,366)(261,278,300,321,341,352) ;(0.9,0.3,0.6)	(255,274,298,311,330,352)(260,283,309,328,341,387)(250,272,298,306,345,378) ;(0.6,0.1,0.7)	(224,243,269,287,321,369)(239,256,281,302,340,368)(229,258,271,299,356,378);(0.4,0.2,0.6)

4	(189,207,234,265,270,284)(205,227,243,269,312,342)(212,241,270,286,301,324) ;(0.7,0.6,0.6)	(178,223,243,278,307,324)(182,207,233,259,290,332)(187,212,239,259,283,310);(0.6,0.5,0.8)	(169,187,207,219,239,253)(172,197,208,219,243,257)(175,189,211,223,238,246);(0.9,0.6,0.4)
5	(147,153,169,183,221,226)(152,173,191,200,226,239)(143,151,163,178,197,215) ;(0.8,0.9,0.1)	(132,148,165,172,185,192)(136,143,157,173,181,195)(144,157,186,193,200,203) ;(0.5,0.3,0.4)	(121,136,154,168,195,217)(128,143,159,163,183,203)(123,142,153,162,178,189);(0.4,0.5,0.2)
g	$s = 3$		
1	(375,393,411,438,473,492)(379,403,423,448,471,499)(378,397,412,439,457,478);(0.8,0.5,0.2)	(363,387,404,443,468,491)(369,395,409,428,435,467)(379,397,413,438,461,481);(0.4,0.3,0.3)	(342,368,389,449,464,480)(351,368,398,421,463,476)(362,397,401,422,457,482);(0.8,0.7,0.4)
2	(297,312,347,372,396,411)(303,321,356,372,407,432)(310,333,350,364,383,418);(0.6,0.1,0.3)	(287,314,346,389,425,444)(291,309,343,373,398,419)(304,314,357,377,390,427) ;(0.5,0.3,0.6)	(271,296,332,346,352,367)(283,305,337,368,395,410)(292,326,348,357,367,394);(0.7,0.5,0.4)
3	(338,357,384,418,451,469)(342,371,390,428,445,478)(340,353,381,409,427,458) ;(0.9,0.5,0.4)	(307,336,368,398,425,454)(303,328,359,386,410,434)(312,347,372,403,432,458) ;(0.7,0.8,0.2)	(307,342,350,372,398,421)(301,337,358,371,388,392)(320,342,357,374,392,402);(0.5,0.3,0.6)
4	(83,98,117,132,141,146)(89,104,121,139,152,163)(87,101,128,137,142,153);(0.6,0.9,0.8)	(78,89,102,116,130,142)(75,82,93,109,121,136)(83,107,112,127,132,141) ;(0.3,0.3,0.8)	(56,73,85,92,109,118)(63,78,86,91,105,112)(65,71,83,92,100,112) ;(0.5,0.9,0.7)
5	(38,47,53,62,76,91)(47,53,68,75,83,97)(42,54,62,69,78,83) ;(0.2,0.9,0.7)	(23,35,47,54,71,87)(25,32,41,48,58,68)(27,32,48,54,63,75) ;(0.3,0.8,0.5)	(26,31,38,42,51,61)(21,29,31,36,42,49)(23,29,38,41,49,52) ;(0.2,0.6,0.8)

Table 15. Input for the expected time (non-contagious)

Estimated time of non-contagious population travelling from source g to RC s using conveyance q			
	$s = 1$		
g	$q = 1$	$q = 2$	$q = 3$
1	(241,252,294,358,384,391)(256,268,295,338,369,398)(255,261,286,302,365,432));(0.7,0.4,0.6)	(280,302,322,378,465,504)(285,302,325,368,390,421)(245,275,321,335,365,423);(0.9,0.1,0.1)	(126,168,170,198,222)(123,149,166,179,199,234)(135,145,168,173,189,221);(0.9,0.4,0.5)
2	(147,189,210,238,241,330)(110,148,167,180,190,210)(103,148,166,174,180,220);(0.6,0.8,0.8)	(113,145,168,189,210,245)(121,139,159,178,189,211)(115,145,159,168,185,199) ;(0.5,0.6,0.7)	(100,115,141,151,181,196)(121,135,159,171,211,235)(109,121,135,148,169,189);(0.9,0.6,0.7)
3	(235,248,277,302,335,472)(210,232,241,269,285,321)(225,245,268,291,310,325);(0.6,0.3,0.6)	(241,259,277,298,335,498)(231,257,299,312,354,369)(235,259,292,301,335,385) ;(0.7,0.5,0.3)	(212,235,268,288,298,376)(231,249,277,285,299,322)(235,248,259,289,320,341);(0.9,0.6,0.6)
4	(201,215,255,268,318)(235,239,255,292,301,322)(218,245,257,269,300,339);(0.7,0.9,0.9)	(212,238,259,277,310,365)(200,229,253,292,308,335)(228,238,268,284,322,335);(0.6,0.4,0.6)	(198,222,236,285,320,336)(188,198,235,247,296,336)(210,222,238,248,279,330);(0.9,0.1,0.4)
5	(196,212,298,335,398,482)(202,223,298,356,368,445)(225,248,289,325,378,425) ;(0.8,0.1,0.2)	(168,182,212,238,259,309)(180,192,220,231,241,250)(156,178,190,210,232,251);(0.6,0.7,0.6)	(191,212,222,268,285,319)(201,215,236,268,285,325)(195,224,232,268,278,328);(0.7,0.6,0.9)
g	$s = 2$		
1	(259,275,312,334,358,396)(247,269,301,312,336,378)(265,288,324,368,389,412);(0.4,0.3,0.4)	(245,278,302,312,358,425)(236,278,290,312,378,390)(281,310,330,347,358,378) ;(0.9,0.4,0.6)	(302,385,425,445,485,514)(335,375,411,468,478,495)(368,378,381,419,456,512);(0.5,0.2,0.2)
2	(112,139,159,189,223,272)(100,124,169,189,220,245)(112,169,198,225,238,259);(0.8,0.4,0.6)	(178,202,257,288,322,397)(177,185,256,269,270,290)(178,203,234,268,290,310);(0.9,0.5,0.4)	(189,212,235,259,288,444)(198,212,238,259,298,311)(179,199,239,289,325,348);(0.2,0.8,0.7)

3	(341,377,401,439,489,464)(368,410,432,458,512,574)(340,391,411,439,475,501);(0.6,0.2,0.5)	(289,320,342,387,445,494)(330,325,368,387,412,458)(335,369,359,398,391,412);(0.8,0.6,0.7)	(270,295,312,355,368,445)(271,298,325,347,375,410)(254,289,326,328,375,387);(0.9,0.7,0.5)
4	(150,167,200,237,279,293)(156,189,223,245,258,302)(145,190,222,245,268,298);(0.6,0.9,0.5)	(178,201,235,269,290,304)(180,210,235,269,368,389)(209,239,247,310,388,390);(0.9,0.2,0.2)	(145,153,220,238,270,391)(150,182,223,238,241,278)(150,161,168,190,234,298);(0.8,0.9,0.4)
5	(185,192,231,248,289,305)(187,223,236,255,285,321)(215,228,249,259,286,322) ;(0.5,0.4,0.2)	(82,101,109,132,176,194)(90,108,138,169,222,268)(132,139,159,189,223,259) ;(0.4,0.7,0.1)	(110,132,189,239,252,297)(89,112,154,216,238,241)(120,132,150,168,191,210);(0.5,0.7,0.9)
g	$s = 3$		
1	(412,435,445,512,518,535)(433,456,485,512,522,536)(411,425,468,499,546,587);(0.9,0.1,0.2)	(292,433,497,589,682,728)(399,436,489,580,639,678)(390,445,512,590,666,690) ;(0.8,0.3,0.3)	(150,169,239,310,335,428)(170,205,268,305,324,369)(220,235,279,325,355,369);(0.5,0.4,0.1)
2	(331,358,385,411,456,460)(351,382,401,433,469,485)(349,369,401,412,450,489);(0.7,0.4,0.3)	(312,342,378,398,410,490)(285,311,358,387,411,432)(331,348,368,412,423,438);(0.6,0.5,0.1)	(362,378,389,422,488,530)(332,351,378,399,426,468)(316,341,369,398,422,456);(0.7,0.2,0.7)
3	(361,402,426,445,478,591)(375,399,426,435,466,491)(378,398,452,489,499,523) ;(0.8,0.5,0.5)	(187,208,235,245,332,385)(180,198,215,268,286,339)(240,259,268,336,378,398);(0.8,0.6,0.3)	(345,387,412,449,478,567)(352,369,387,425,444,478)(359,375,422,459,479,523);(0.9,0.7,0.1)
4	(85,115,132,162,184,212)(87,90,110,132,154,160)(78,90,101,124,138,179) ;(0.8,0.8,0.6)	(83,123,141,151,178,248)(93,112,139,151,178,198)(88,98,123,135,142,178) ;(0.7,0.6,0.7)	(54,68,79,98,116,144)(66,74,89,100,112,121)(76,82,99,108,111,119);(0.3,0.8,0.8)
5	(38,63,78,103,135,161)(70,77,89,121,132,159)(80,89,95,121,142,169);(0.4,0.2,0.3)	(50,60,85,102,138,204)(52,58,75,89,135,157)(60,89,112,132,147,169) ;(0.5,0.1,0.9)	(60,79,99,131,159,270)(70,89,110,135,168,189)(69,89,121,139,159,189);(0.9,0.3,0.6)

Table 16. Input for the expected time (contagious)

Estimated time of contagious population travelling from source g to RC s using conveyance q			
	$s = 1$		
g	$m = 1$	$m = 2$	$m = 3$
1	(210,245,249,298,328,474)(201,225,253,288,321,345)(222,256,289,299,321,341);(0.7,0.6,0.6)	(251,260,298,339,407,446)(230,255,288,310,356,398)(269,280,309,348,369,437);(0.6,0.4,0.3)	(191,209,236,268,291,324)(201,223,238,241,291,322)(191,218,267,289,320,339);(0.6,0.7,0.7)
2	(104,131,150,169,201,225)(92,109,143,163,181,198)(102,119,137,153,179,188);(0.9,0.8,0.6)	(101,109,142,170,202,215)(109,112,139,141,178,199)(102,111,122,131,178,221);(0.6,0.5,0.9)	(88,98,107,153,171,179)(91,103,121,142,159,189)(108,112,129,138,156,188);(0.9,0.3,0.2)
3	(178,199,245,278,321,331)(201,221,237,278,289,321)(178,207,254,266,288,290);(0.5,0.5,0.7)	(203,223,267,291,318,358)(212,237,278,298,302,334)(195,231,243,278,309,332) ;(0.8,0.2,0.8)	(198,234,253,334,381,425)(189,203,228,251,269,368)(198,217,240,278,290,350);(0.9,0.3,0.2)
4	(198,202,237,269,306,342)(182,220,239,269,289,321)(173,199,228,259,278,298) ;(0.6,0.5,0.7)	(168,173,189,232,267,289)(157,183,219,232,249,267)(162,193,228,238,251,264);(0.9,0.6,0.9)	(151,167,187,213,245,248)(145,168,191,206,233,243)(150,168,183,204,235,267);(0.8,0.3,0.8)
5	(181,189,209,238,259,324)(182,189,211,239,276,288)(221,238,267,298,301,309);(0.9,0.5,0.1)	(147,158,188,190,231,257)(139,157,178,191,207,211)(170,183,199,208,211,249);(0.8,0.3,0.7)	(159,169,179,209,234,294)(151,166,189,203,239,267)(164,171,189,231,248,269);(0.6,0.3,0.8)
g	$s = 2$		

1	(234,245,267,289,322,350)(271,298,311,328,349,369)(256,268,289,299,344,356);(0.7,0.3,0.5)	(237,273,281,339,351,415)(248,269,288,312,330,347)(250,278,287,309,347,367);(0.3,0.4,0.4)	(249,256,288,295,359,383)(238,249,280,293,310,341)(246,251,289,292,334,353);(0.7,0.6,0.2)
2	(170,198,203,239,256,300)(177,194,232,246,298,312)(179,211,227,238,269,298);(0.8,0.1,0.7)	(127,148,178,191,202,274)(159,174,193,201,230,233)(150,176,198,209,238,245) ;(0.4,0.9,0.5)	(152,178,188,193,230,261)(156,171,189,228,259,288)(138,153,178,190,223,258);(0.6,0.8,0.6)
3	(278,291,322,339,368,380)(270,310,322,340,368,432)(261,298,333,367,381,390) ;(0.9,0.3,0.6)	(268,274,298,322,348,442)(270,283,319,328,359,387)(259,272,302,328,381,390) ;(0.9,0.3,0.6)	(238,243,269,307,321,404)(239,269,281,322,359,379)(229,258,289,319,356,392);(0.7,0.3,0.6)
4	(189,207,234,265,270,313)(205,227,243,269,312,342)(232,261,279,296,328,350) ;(0.9,0.4,0.6)	(198,231,243,298,321,382)(194,227,248,259,318,349)(198,212,239,270,283,330);(0.8,0.5,0.7)	(169,198,207,219,248,290)(189,217,221,238,243,291)(175,189,211,231,268,291);(0.9,0.3,0.4)
5	(149,153,178,183,241,246)(160,173,191,212,226,259)(143,160,189,190,210,232) ;(0.8,0.9,0.1)	(138,148,179,188,212,243)(136,143,168,189,190,212)(151,168,191,221,239,257) ;(0.5,0.2,0.3)	(89,102,129,138,158,213)(109,131,159,163,179,187)(123,142,153,162,178,181);(0.4,0.6,0.2)
g	$s = 3$		
1	(375,393,456,498,510,521)(379,421,435,448,490,538)(378,397,433,460,482,509);(0.9,0.3,0.7)	(368,387,409,443,479,510)(381,395,418,428,449,467)(379,409,413,456,461,499);(0.4,0.3,0.2)	(361,370,389,358,463,547)(348,368,403,421,477,498)(370,397,401,438,457,498);(0.7,0.5,0.4)
2	(302,329,347,388,492,564)(308,321,369,389,412,448)(320,333,355,364,390,422);(0.7,0.2,0.5)	(178,227,288,291,308,327)(287,309,343,373,389,402)(304,309,341,377,390,410) ;(0.8,0.3,0.6)	(289,296,332,369,381,408)(283,309,337,388,395,438)(292,332,348,357,379,403);(0.7,0.6,0.4)
3	(340,357,392,429,478,554)(342,371,411,428,469,478)(340,353,381,412,439,469) ;(0.9,0.4,0.3)	(238,279,312,349,378,453)(280,328,359,370,389,410)(312,347,372,403,432,458) ;(0.7,0.8,0.2)	(328,342,368,398,418,463)(301,337,379,389,421,478)(320,342,369,374,432,459);(0.5,0.3,0.6)
4	(69,82,101,122,138,163)(58,79,102,118,120,137)(67,82,90,108,121,135);(0.5,0.9,0.8)	(81,89,109,116,142,157)(78,82,101,109,132,148)(95,119,128,149,169,188) ;(0.5,0.9,0.8)	(41,49,58,65,78,120)(54,67,82,85,98,102)(58,69,80,91,98,108) ;(0.4,0.8,0.7)
5	(45,68,71,87,108,140)(57,77,82,103,112,123)(42,69,78,81,87,109) ;(0.2,0.9,0.7)	(23,37,47,56,85,102)(25,38,41,59,67,89)(27,33,48,57,69,87) ;(0.3,0.8,0.5)	(28,34,38,47,68,82)(21,32,34,40,48,58)(23,35,40,48,58,69) ;(0.9,0.6,0.8)

Table 17. Input for the halt, refueling, and maintenance time by the conveyance (non-contiguous)

Halt, refueling, and maintenance time taken by conveyance q transporting non-contiguous population travelling from source g to RC s using conveyance q			
	$s = 1$		
g	$q = 1$	$q = 2$	$q = 3$
1	(7,9,11,15,25,27)(5,8,10,16,17,26)(6,8,11,16,18,21);(0.9,0.6,0.2)	(11,15,20,21,26,32)(12,17,21,27,30,34)(15,19,22,25,29,32);(0.4,0.8,0.8)	(7,9,10,12,17,21)(5,7,8,11,15,17)(4,5,8,10,12,15);(0.8,0.2,0.2)
2	(10,14,18,22,26,35)(11,15,16,21,24,25)(12,14,15,18,20,22);(0.3,0.6,0.8)	(5,8,116,17,19,28)(7,9,15,16,18,20)(8,11,14,17,19,21);(0.4,0.9,0.8)	(7,9,11,15,25,27)(5,8,10,16,17,26)(6,8,11,16,18,21);(0.9,0.6,0.2)
3	(8,9,10,12,15,19)(6,8,10,11,15,18)(4,6,9,10,13,15);(0.7,0.3,0.2)	(12,15,18,21,22,27)(7,10,13,15,18,20)(11,14,16,18,21,24) ;(0.5,0.8,0.5)	(12,13,17,24,28,41)(13,18,21,28,29,36)(15,20,25,28,35,38);(0.2,0.6,0.9)
4	(9,11,15,16,19,27)(7,10,13,15,19,21)(3,6,8,12,15,17) ;(0.6,0.8,0.9)	(14,15,19,26,30,31)(14,20,25,28,31,34)(16,20,25,29,36,38);(0.2,0.6,0.9)	(7,10,11,12,19,22)(8,11,13,17,18,19)(9,11,12,17,20,22);(0.9,0.8,0.9)
5	(13,15,17,28,34,41)(13,18,21,22,23,26)(10,11,15,19,29,33);(0.5,0.1,0.6)	(15,18,22,27,31,35)(9,11,26,28,30,36)(15,20,25,29,33,38);(0.7,0.6,0.9)	(15,16,21,23,25,27)(10,11,13,15,18,21)(12,14,17,20,22,26);(0.5,0.8,0.5)

g	$s = 2$		
1	(15,18,21,26,33,45)(11,19,20,28,33, 39)(16,18,22,28,33,38);(0.9,0.2,0.3)	(12,15,16,19,24,29)(14,15,17,20,21, 26))(19,20,23,24,25,27);(0.7,0.8,0.9)	(7,16,18,20,22,24)(8,10,16,19,22,25) (9,11,15,18,19,21);(0.9,0.5,0.8)
2	(15,18,21,35,42,49)(18,22,24,35,39, 40)(19,21,23,24,26,27);(0.6,0.1,0.3)	(12,16,17,18,19,22)(14,18,20,22,23, 26)(19,21,23,24,26,27) ;(0.7,0.8,0.9)	(5,7,11,15,17,19)(7,11,15,16,17,18) (8,11,15,19,20,21);(0.9,0.8,0.9)
3	(12,13,22,27,29,31)(14,18,23,28,32, 36)(15,24,26,28,35,40) ;(0.2,0.6,0.9)	(12,14,25,27,36,42)(12,17,24,30,31, 39)(15,18,22,26,29,34) ;(0.3,0.8,0.8)	(14,15,17,27,32,43)(13,18,21,28,29, 36)(15,20,25,28,35,38);(0.1,0.9,0.8)
4	(10,13,15,22,25,26)(13,18,21,28,29, 36)(13,18,20,21,23,27) ;(0.8,0.5,0.8)	(12,13,18,24,32,37)(11,15,20,27,29, 38)(12,18,21,24,29,34);(0.2,0.6,0.9)	(8,9,12,13,17,21)(6,10,12,16,19,27) (7,8,15,18,20,22);(0.9,0.6,0.2)
5	(11,13,18,21,29,33)(15,18,21,28,33, 36)(11,21,25,28,34,40) ;(0.2,0.6,0.9)	(10,12,14,15,16,22)(7,10,13,17,23,2 7)(6,8,15,17,20,22) ;(0.5,0.4,0.7)	(13,15,17,21,26,29)(15,18,20,23,25, 31)(19,20,25,28,30,35);(0.3,0.9,0.9)
g	$s = 3$		
1	(8,14,21,23,25,27)(12,17,22,27,31,3 3)(15,19,22,25,29,32);(0.3,0.8,0.8)	(12,13,17,23,26,36)(13,18,21,27,28, 35) (15,20,22,27,30,31);(0.2,0.6,0.9)	(9,11,18,20,24,27)(7,10,13,15,19,20) (10,14,15,18,20,21);(0.6,0.7,0.5)
2	(12,13,17,24,28,41)(13,18,21,28,29, 36)(15,20,25,28,35,38);(0.2,0.6,0.9)	(14,15,18,20,24,38)(15,18,19,20,21, 30)(19,21,23,26,28,38) ;(0.7,0.8,0.9)	(11,15,19,25,27,33)(11,15,16,21,24, 25)(12,13,14,17,19,22);(0.2,0.6,0.8)
3	(15,18,21,26,28,30)(11,19,20,21,27, 30)(16,18,22,23,26,27) ;(0.9,0.2,0.3)	(8,9,11,15,17,20)(6,7,10,11,16,20) (6,8,9,10,13,19) ;(0.8,0.2,0.2)	(12,15,22,25,26,32)(13,17,21,28,30, 35)(16,21,24,25,33,36);(0.4,0.8,0.8)
4	(18,23,28,33,39,49)(15,19,26,28,33, 45)(16,20,22,34,39,41);(0.5,0.4,0.6)	(13,15,17,24,25,38)(14,18,22,28,30, 36)(16,21,25,30,35,41) ;(0.1,0.6,0.9)	(13,15,17,26,35,41)(14,18,27,33,36, 38)(16,20,26,28,35,38) ;(0.2,0.6,0.9)
5	(19,23,27,33,45,58)(16,19,26,33,38, 45)(16,25,30,36,43,50) ;(0.9,0.7,0.3)	(21,23,30,33,43,49)(18,23,26,31,39, 47)(20,25,35,39,42,45) ;(0.5,0.4,0.6)	(24,26,30,35,40)(26,28,34,39,45,53) (17,21,22,35,43,46) ;(0.7,0.6,0.9)

Table 18. Inputs for halt, refueling, and maintenance time by the conveyance (contiguous)

Halt, refueling, and maintenance time taken by conveyance m transporting contiguous population travelling from source g to RC s			
	$s = 1$		
g	$m = 1$	$m = 2$	$m = 3$
1	(14,15,18,20,23,26)(10,12,18,27,32, 35)(12,18,25,28,31,35);(0.7,0.8,0.6)	(21,23,33,35,37,41)(17,19,27,31,33, 42)(15,25,27,31,37,41);(0.3,0.4,0.6)	(7,10,11,15,16,18)(5,11,16,17,18,19) (8,10,11,12,15,18);(0.6,0.7,0.8)
2	(16,18,25,26,40,44)(12,19,20,33,37, 45)(17,18,25,32,37,41);(0.9,0.2,0.9)	(7,10,12,13,15,20)(5,8,10,12,18,21) (6,8,9,12,17,21);(0.7,0.7,0.9)	(8,9,13,15,18,21)(10,11,16,18,21,28) (7,10,12,14,23,26);(0.2,0.6,0.2)
3	(8,11,13,14,18,27)(7,8,11,12,16,18) (5,6,7,9,13,15);(0.2,0.3,0.2)	(11,15,19,24,25,29)(15,18,22,29,30, 38)(16,22,25,28,35,41) ;(0.1,0.6,0.9)	(13,16,17,26,28,37)(14,18,22,28,30, 36)(16,21,25,26,31,39);(0.1,0.6,0.8)
4	(9,10,11,12,15,17)(5,9,11,12,13,20) (5,8,11,12,15,16,) ;(0.7,0.5,0.7)	(6,7,12,15,20,24)(7,11,16,18,202,21) (8,11,15,16,18,19);(0.5,0.8,0.9)	(10,12,14,15,16,17)(8,9,11,12,13,18) (5,7,9,12,13,15);(0.7,0.3,0.2)
5	(10,12,13,14,15,20)(11,15,16,19,20, 22)(8,10,11,12,13,14);(0.7,0.3,0.2)	(8,9,10,13,14,19)(6,8,10,11,15,18) (6,4,9,10,13,15);(0.7,0.3,0.2)	(13,16,17,24,25)(15,18,22,28,31,36) (16,21,25,32,35,41);(0.5,0.6,0.9)
g	$s = 2$		
1	(6,7,12,16,20,23)(8,12,15,16,17,21) (10,11,15,16,20,22);(0.7,0.8,0.9)	(10,11,18,21,25,32)(12,19,20,23,28, 31)(17,18,23,25,28,29);(0.9,0.5,0.6)	(16,18,23,25,32,34)(12,16,19,20,21, 25)(12,18,20,22,25,31);(0.5,0.8,0.9)
2	(7,10,12,13,17,21)(6,8,10,12,14,18) (5,8,10,11,13,18);(0.8,0.3,0.1)	(11,15,19,22,27,35)(15,16,20,22,28, 33)(10,15,16,17,21,30) ;(0.2,0.4,0.9)	(10,11,15,16,20,26)(12,18,19,23,25, 29)(11,13,18,20,21,22);(0.5,0.8,0.5)

3	(15,18,21,25,26,28)(12,16,18,22,27, 35)(18,23,25,34,38,40) ;(0.5,0.4,0.6)	(13,14,16,20,23,29)(10,13,15,19,20, 22)(10,12,16,21,22,23) ;(0.9,0.8,0.9)	(16,20,23,24,28,31)(14,15,19,21,28, 31)(15,18,20,28,33,38);(0.8,0.7,0.6)
4	(8,10,11,12,16,17)(9,10,12,14,15,18) (4,8,9,10,14,15) ;(0.8,0.3,0.2)	(15,18,20,21,23,27)(7,11,15,19,25,2 6)(12,15,18,24,26,31);(0.7,0.9,0.9)	(8,9,10,11,14,16)(7,8,12,13,15,18) (4,6,9,10,12,15,);(0.7,0.3,0.2)
5	(9,10,11,13,14,19)(6,8,10,11,12,18) (7,9,11,12,13,15) ;(0.7,0.5,0.4)	(8,9,10,12,18,23)(8,10,11,12,15,18) (4,6,9,10,13,18) ;(0.7,0.8,0.2)	(12,19,21,23,32,38)(10,11,13,15,18, 21)(12,14,15,17,19,29);(0.5,0.8,0.6)
g	$s = 3$		
1	(14,15,18,23,25,31)(15,18,23,28,31, 36)(15,21,26,30,33,40);(0.1,0.6,0.9)	(19,23,25,26,30,36)(17,21,26,28,30, 35) (11,21,22,28,29,30);(0.9,0.8,0.6)	(8,9,11,12,16,20)(6,8,10,11,19,22) (6,7,10,12,18,21);(0.7,0.7,0.9)
2	(14,15,19,24,27,31)(15,18,22,29,31, 36)(16,22,25,31,35,37);(0.6,0.8,0.9)	(10,12,15,18,19,28)(8,11,13,16,18,2 2)(7,8,12,17,18,22) ;(0.7,0.6,0.6)	(8,12,14,16,18,21)(8,10,13,16,17,22) (9,10,13,15,16,18);(0.9,0.6,0.2)
3	(19,21,28,30,39,42)(15,19,26,27,31, 38)(16,20,22,26,31,41) ;(0.5,0.4,0.6)	(10,13,15,16,20,25)(10,12,13,14,15, 17)(10,12,13,14,16,20) ;(0.9,0.9,0.8)	(8,9,12,13,19,23)(6,10,12,16,19,27) (5,8,11,12,15,19);(0.5,0.7,0.6)
4	(21,23,28,34,45,54)(15,25,26,32,39, 45)(16,25,29,31,39,46);(0.5,0.4,0.6)	(11,15,17,19,26,32)(10,11,12,15,16, 19)(12,14,15,16,18,20) ;(0.5,0.4,0.6)	(8,11,12,14,15,16)(9,10,11,12,15,20) (6,8,11,15,16,17) ;(0.4,0.7,0.9)
5	(16,18,22,24,25,31)(11,12,13,17,19, 24)(10,16,17,18,21,28) ;(0.5,0.7,0.8)	(22,23,25,26,31,46)(15,19,21,23,25, 29)(16,20,21,25,27,28) ;(0.1,0.9,0.6)	(14,15,17,20,22,26)(14,18,22,23,24, 27)(17,22,23,20,30,32) ;(0.8,0.6,0.9)

Table 19. Input for accommodation time, cost, medical and penalty cost, capacity of conveyance and RC, population at source, time restriction of conveyance, overall cost and time restrictions

Accommodation time of non-contiguous population at s RC		
$s = 1$	$s = 2$	$s = 3$
(17,19,26,29,32,36)(16,21,22,24,27, 28)(18,26,27,29,31,32));(0.7,0.9,0.7)	(15,19,20,27,29,31)(14,15,18,20,28,32)(16, 21,25,26,31,39);(0.5,0.6,0.8)	(16,20,25,27,30,47)(13,20,22,24,2 6,29)(12,15,18,20,21,24);(0.3,0.9,0 .9)
Accommodation time of contiguous population at s RC		
(12,13,15,21,24,26)(17,22,26,28,29,3 6)(14,18,22,23,25,27);(0.6,0.7,0.8)	(26,37,40,41,44,50)(20,22,24,29,31,3 8)(23,29,31,36,41,48);(0.5,0.6,0.9)	(20,24,30,35,39,47)(15,19,26,27,31,38)(16,20,22,26,31,41);(0.6,0.5,0.9)
Accommodation and medical cost of non-contiguous population at s RC		
(92,112,128,175,189,216)(101,112,1 24,149,157,174)(100,117,127,145,18 2,191);(0.7,0.3,0.8)	(86,98,108,137,147,166)(86,103,121, 134,141,152)(93,112,131,139,144,15 1);(0.5,0.6,0.6)	(93,128,155,162,175,193)(99,112,124,1 41,157,163)(95,103,116,131,148,159);(0.9,0.4,0.9)
Accommodation and medical cost of contiguous population at s RC		
(203,231,254,284,337,351)(215,239, 253,278,304,314)(204,221,249,267,3 19,378);(0.9,0.1,0.5)	(197,247,268,311,336,395)(192,225, 259,281,312,329)(207,221,253,267,3 29,357);(0.6,0.5,0.6)	(212,239,249,284,301,324)(208,240,26 8,274,307,338)(221,245,267,280,304,32 5);(0.9,0.2,0.5)
Capacity of conveyance q carrying non-contiguous population		
q=1	q=2	q=3
(1789,1837,2234,2468,2689,2842) (1691,1987,2283,2479,2789,2974) (1709,1789,2043,2234,2347,2578) ;(0.8,0.4,0.4)	(1834,1982,2374,2468,2834,3158) (1721,2031,2234,2543,2813,3144) (1833,1923,2134,2344,2741,2813) ;(0.6,0.7,0.7)	(2038,2183,2389,2584,2768,3807) (1983,2038,2234,2488,2567,2768) (2189,2234,2345,2467,2789,2987) ;(0.7,0.9,0.8)
Capacity of conveyance m carrying contiguous population		
$m = 1$	$m = 2$	$m = 3$

(1238,1377,1584,1834,2230,2375) (1384,1584,1684,1738,1821,1944) (1128,1283,1389,1483,1584,1685) ;(0.9,0.5,0.6)	(1392,1456,1611,1928,2345,2486) (1485,1698,1789,1738,2018,2193) (1389,1489,1589,1898,2048,2194) ;(0.8,0.6,0.7)	(897,998,1057,1174,1345,1425) (812,914,1076,1274,1467,1679) (988,1183,1290,1367,1541,1690) ;(0.6,0.2,0.8)
Capacity of non-contiguous population in RC s		
q=1	q=2	q=3
(1134,1489,1658,2183,2389,2699) (1581,1897,2134,2345,2412,2678) (1489,1541,1765,2021,2374,2564) ;(0.7,0.9,0.2)	(1578,1762,1989,2389,2768,2988) (1678,1982,2148,2378,2588,2714) (1756,1989,2234,2564,2789,2919) ;(0.6,0.4,0.8)	(1589,1878,1987,2183,2631,2790) (1578,1876,2173,2468,2568,2878) (1787,2087,2456,2768,2989,3273) ;(0.9,0.1,0.2)
Capacity of contiguous population in RC s		
$m = 1$	$m = 2$	$m = 3$
(1028,1173,1384,1578,1878,2027) (894,1084,1183,1274,1378,1475) (1021,1123,1241,1345,1475,1563) ;(0.6,0.3,0.1)	(767,983,1048,1347,1512,1653) (878,988,1123,1284,1475,1578) (1123,1238,1374,1475,1510,1576) ;(0.4,0.8,0.7)	(1256,1475,1562,1767,2234,2387) (1023,1234,1467,1898,2238,2589) (1077,1152,1564,1789,1987,2183) ;(0.9,0.1,0.2)

Non-contiguous population at source g				
$g = 1$	$g = 2$	$g = 3$	$g = 4$	$g = 5$
(213,323,475,546,735,836)(328,424,511,589,634,841)(210,213,345,411,587,698);(0.2,0.5,0.3)	(846,1193,1374,1578,1657,1763)(878,988,1123,1384,1637,1872)(1123,1238,1374,1475,1510,1567);(0.6,0.8,0.7)	(367,478,684,1093,1224,1490)(475,567,746,894,1023,1134)(574,612,698,843,987,1089);(0.4,0.5,0.3)	(891,1235,1678,1984,2298,2442)(987,1173,1345,1475,1697,1874)(1137,1374,1783,2031,2345);(0.4,0.9,0.3)	(574,678,746,954,1106,1227)(878,988,1123,1284,1344,1423)(787,837,1087,1173,1273,1374);(0.9,0.5,0.7)
Contiguous population at source g				
(647,789,846,918,1089,1189)(567,738,812,1038,1183,1374)(738,937,1038,1129,1293,1394);(0.,50.7,0.6)	(651,837,1043,1384,1684,1876)(748,1048,1283,1384,1643,1878)(647,878,1038,1183,1384,180);(0.7,0.5,0.8)	(347,475,732,832,1134,1381)(465,568,623,712,837,983)(675,742,811,912,1045,1321) ;(0.8,0.9,0.5)	(633,765,857,931,1078,1179)(589,688,913,1048,1183,1283)(748,984,1039,1128,1283,1384);(0.4,0.9,0.4)	(238,298,256,657,712,869)(241,298,323,412,658,891)(283,311,359,435,568,734);(0.8,0.8,0.9)

Time restrictions for q type conveyance carrying non-contiguous population		
$q = 1$	$q = 2$	$q = 3$
(1898,2093,2344,2488,3018,3374) (1891,2098,2273,2472,2787,2987) (2083,2283,2578,2789,2987,3021) ;(0.7,0.3,0.7)	(1586,1857,2346,2576,3012,3271) (1748,2239,2374,2560,2576,2987) (1498,1678,1893,2183,2589,2989) ;(0.5,0.6,0.8)	(767,824,957,1284,1378,1473) (837,1098,1183,1283,1578,1748) (872,1023,1374,1564,1837,1938) ;(0.6,0.9,0.3)
Time restrictions for m type conveyance carrying contiguous population		
$m = 1$	$m = 2$	$m = 3$
(2898,3374,3987,4284,4512,4744) (2894,3374,3879,4283,4589,4989) (3485,3757,3982,4458,4679,4983) ;(0.9,0.4,0.2)	(3546,4567,5678,6371,7467,8129) (3678,4657,4987,5123,5789,6785) (3898,4028,4384,4583,4789,5483) ;(0.1,0.7,0.4)	(2678,2891,3475,3657,3812,3943) (2568,2764,3374,3567,3787,4184) (2746,2987,3274,3574,3748,4032) ;(0.8,0.2,0.1)

Penalty cost for non-contiguous population	Penalty cost for contiguous population	Overall time restrictions	Overall cost restrictions

(56,71,81,95,110,127)(65,89,119,121,134,140)(70,83,98,110,128,137);(0.4,0.7,0.9)	(134,151,167,234,250,272) (124,148,161,234,256,268) (110,138,169,192,234,259,268);(0.9,0.3,0.5)	(17364,22345,25678,28091,31098,33040)(19837,24657,27898,31746,33647,37898) (21897,22839,25768,28987,31837,34758);(0.9,0.7,0.7)	(28713389,3263791,3478128,3894718,4198771,4567086)(3098717,3374899,3783948,4384748,4893828,5273890)(3384790,3784741,4092837,4374848,4672817,4785918)(0.6,0.7,0.8)