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Table 1. Annual number of tourists related equations

Variable	Equation	Unit
Tourists enter	Growth number of flagship facility+The number of tourist growth	People
Tourist leave	IF THEN ELSE (The degree of traffic congestion+ The level of tourists crowded > Maximum density, Tourist enter, (IF THEN ELSE (The degree of traffic congestion+The level of tourists crowded >Extreme density, Tourist enter *0.6, (IF THEN ELSE (The degree of traffic congestion+The level of tourists crowded >Tolerable density, Tourist enter *0.4,0))))	People
The degree of traffic congestion	(Annual Number of tourists/365+The population of the study area*0.5-Daily traffic volume)/Road land use around the recreational land use	(People/area)m ²
The level of tourists crowded	(Annual Number of tourists/365)/(Recreation land use area(time)+Commercial land use area(time))	(People/area)m ²

Table 2. Markov transition probabilities matrix and quantity of land use change in 2016, 2046 in terms of hectare

	Railway	Road	Commercial	Residential	Industrial	Culture	Recreation	Idle	Others	2016(ha)	2046(ha)	2016-2046(ha)
Railway	67.94%	18.01%	0.14%	0%	0%	0%	7.64%	1.91%	4.37%	7.64	7.64	0
Road	0.22%	88.84%	0.79%	3.44%	0.52%	0%	1.35%	2.87%	1.97%	52.76	52.76	0
Commercial	0.13%	4.21%	71.89%	5.86%	7.33%	0%	2.23%	7.46%	0.89%	47.12	52.4	5.28
Residential	0.02%	6.34%	2.42%	87.31%	0.21%	0%	1.44%	1.45%	0.82%	204.16	259.32	55.16
Industrial	0%	2.39%	9.31%	0.38%	58.58%	0.48%	0.51%	28.08%	0.27%	72.44	23.36	-49.08
Culture	0%	0%	0%	47.62%	0%	14.29%	0%	0%	38.10%	0.44	0	-0.44
Recreation	0%	3.87%	0.25%	0.37%	0.25%	0%	71.30%	21.02%	2.93%	56.28	28.08	-28.2
Idle	0%	9.96%	1.10%	3.37%	0.78%	0%	3.29%	69.88%	11.61%	127.88	146	18.12
Others	0.25%	4.83%	2.13%	2.84%	4.93%	0%	0.70%	3.23%	81.09%	213.68	213.68	0