

Table S1: Information on the traffic of the major roads in the southern part of the Tibetan Plateau

Road number	The flow of passenger vehicles	speed(km/h)	The flow of truck	speed(km/h)	The flow of car	speed(km/h)	The flow of motor vehicles	speed(km/h)	Mixed flow	Congestion ratio	Number of trips (pcu·km/d)	Number of dates	Number of hours	Real-time vehicles
G318	1523	47.87	812	41.33	2334	45.65	2485	45.27	2485	0.35	110570	265	6312	136926
G562	890	44.50	527	41.03	1416	42.73	1619	40.83	1619	0.39	70200	231	5502	120390
G219	755	57.60	323	49.34	1073	54.49	1139	53.74	1139	0.26	43717	296	6941	141595
G216	339	20.95	214	15.85	553	19.50	622	18.90	622	0.27	49018	234	5597	98772