

Roadway Capacity - the maximum traffic volume that a roadway can carry at a desired level of service.

Daily Capacities of Paved Two-Lane Roads (at County Level of Service Thresholds)

	Area Type	Useable Shoulder Width (feet) ⁽¹⁾	12-Foot Lanes	11-Foot Lanes	10-Foot Lanes	9-Foot Lanes
Arterials ⁽²⁾	Urban (LOS D)	6	14,600	14,000		
		4	12,500	11,800		
		2	10,200	9,500	8,300	
		0	7,300	6,300	5,100	3,600
	Semi-Urban (LOS D)	6	13,600	13,200		
		4	12,000	11,400		
		2	10,000	9,300	8,200	
		0	7,000	6,000	4,800	3,500
	Rural (LOS C)	6	8,000	7,800		
		4	7,100	6,700		
		2	5,900	5,500	4,900	
		0	4,200	3,600	2,900	2,100
Collectors	All (LOS C)	6	6,300	5,500		
		4	4,000	3,800		
		2	3,000	2,700	2,200	
		0	1,900	1,600	1,300	1,000

Source: Highway Capacity Manual, 2000 with manual balancing

(1) Curb-and-gutter meeting design standards is equivalent to a 6-foot shoulder.

(2) Arterial roads assumed to have left and right turn lanes at accesses and intersections when warranted by turn volumes.

Daily Capacities of Multi-Lane Roads (at County Level of Service Thresholds)

Number of Lanes	Arterials			Collectors
	Urban (LOS D)	Semi-Urban (LOS D)	Rural (LOS C)	All (LOS C)
3 ⁽¹⁾	23,000	20,000	15,000	10,000
4 ⁽²⁾	30,000	27,000	20,000	15,000
6 ⁽²⁾	45,000	42,000	35,000	n/a

Source: Arapahoe County Roadway Design & Technical Criteria, Highway Capacity Manual, 2000 with manual balancing

(1) The third lane serves as a continuous left-turn lane for accesses and intersections.

(2) Four-lane and six-lane roads assumed to be separated with a median with left and right turn lanes provided at accesses and intersections when warranted by turn volumes.