



### Level of Service



#### **Level of Service**

*A qualitative measure describing the efficiency of traffic flow. Level of Service designations are used to describe the operating characteristics of the street system in terms of the level of congestion or delay experienced by traffic.*

As the County continues to grow, transportation demand management and systems management will be necessary to preserve and increase available roadway “capacity.” Level of Service (LOS) standards are used to assess the performance of a street or highway system and the capacity of a roadway.

An important goal when planning the transportation system is to maintain acceptable levels of service along the federal and state highways and the local roadway network. To accomplish this, the California Department of Transportation (Caltrans), Riverside County Transportation Commission, the County, and local agencies adopt minimum levels of service to determine future infrastructure needs.

Riverside County must provide and maintain a highway system with adequate capacity and acceptable levels of service to accommodate projected travel demands associated with the buildout of the Land Use Element. This can be accomplished by establishing minimum service levels for the designated street and conventional state highway system. Strategies that result in improvements to the transportation system, coupled with local job creation, will allow County residents to have access to a wide range of job opportunities within reasonable commute times.

#### **Policies:**

C 2.1 Maintain the following countywide target Levels of Service:

LOS “C” along all County maintained roads and conventional state highways. As an exception, LOS “D” may be allowed in Community Development areas, only at intersections of any combination of Secondary Highways, Major Highways, Arterials, Urban Arterials, Expressways, conventional state highways or freeway ramp intersections.

LOS “E” may be allowed in designated community centers to the extent that it would support transit-oriented development and walkable communities. (AI 3)

C 2.2 Utilize the adopted level of service standards as the ultimate roadway capacity (average daily trips) in areas within close proximity to master planned roadways to estimate future noise impacts. (AI 3)

C 2.3 Projects that propose an increase in currently approved density and intensity of land use, must prepare a traffic analysis that evaluates the long-term impacts of the project, demonstrating that the planned road system can support the proposed project, together with those land uses already allowed in the area. The analysis would project average daily traffic of roadway links for the buildout situation of the entire area to demonstrate conformance with the target Level of Service standards. In addition, any individual development proposal may be required to provide a traffic analysis to assess peak hour impacts at affected intersections, identifying needed mitigation measures to



*To achieve the true intent of community center design, Level of Service designations are typically lower (LOS E) to minimize the impacts of accommodating uncongested roadways and to maximize pedestrian use. Higher level of service designations (LOS A, B, C) require wider road widths, and as a result, would create circulation systems that are more accommodating to automobiles than*



## County of Riverside General Plan - *Hearing Draft*

### *Circulation Element*

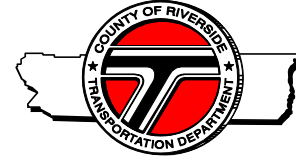
achieve or maintain the target Level of Service. Such impacts may be mitigated by construction of all improvements necessary to achieve the target Level of Service, by payment of a fee or fees if an appropriate funding mechanism is in place, or by any other appropriate means. If the projected traffic does not exceed the target level, mitigation may include, but is not limited to, compliance with standard conditions of approval, or the construction of improvements or payment of fees necessary to mitigate the incremental impact for each development proposal. (AI 3)

- C 2.4 A traffic study may not be necessary in every situation, such as the size or location of the project will not have a significant impact upon and will not change the existing Level of Service. Also, certain types of projects, due to the trip generation characteristics, may add virtually no traffic to the peak hour traffic volumes. These types of projects may be exempt from the traffic study requirements. Whether a particular project qualifies for an exemption will be determined by the Transportation Department. (AI 3)
- C 2.5 Projects that have substantial traffic impacts may have overriding benefits that would be desirable even though the Level of Service Standards cannot be met. Examples might be projects that provide jobs in a local area to aid in meeting regional air quality and mobility goals, projects that serve to provide needed transportation improvements that would not otherwise be constructed, projects that provide habitat conservation, projects that implement non-motorized transportation systems or projects that provide some unique benefit to the County, which would outweigh the traffic impacts. Projects that may qualify as having overriding benefits would be required to analyze traffic impacts and mitigate such impacts to the extent that it is economically feasible as determined by the Board of Supervisors. Proponents of these types of projects shall be required to provide a value engineering analysis in order to determine the level of improvements that would be considered economically feasible.
- C 2.6 Special event uses should not be evaluated by the same criteria as typical traffic generators because the traffic patterns for these uses are not typical and traffic trips are usually not at peak hours (e.g., stadium events, etc.). A traffic management plan will be required for these uses in order to manage traffic. Also, a traffic management plan must include traffic control measures needed to serve major events at the site. Adequate circulation must exist for these types of development and all impacts must be alleviated to the maximum level possible. (AI 3)



Figure C-2 Link/Volume Capacity/Level of Service for Riverside County Roadways

## Link Volume Capacities/Level of Service for Riverside County Roadways<sup>(1)</sup>



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Roadway Classification	Number of Lanes	Maximum Two-Way Traffic Volume (ADT) <sup>(2)</sup>		
		Service Level C	Service Level D	Service Level E
Collector	2	10,400	11,700	13,000
Secondary	4	20,700	23,300	25,900
Major	4	27,300	30,700	34,100
Arterial <sup>(3)</sup>	2	14,400	16,200	18,000
Arterial	4	28,700	32,300	35,900
Mountain Arterial <sup>(3)</sup>	2	12,900	14,500	16,100
Mountain Arterial	3	16,700	18,800	20,900
Mountain Arterial	4	29,800	33,500	37,200
Urban Arterial	4	28,700	32,300	35,900
Urban Arterial	6	43,100	48,500	53,900
Urban Arterial	8	57,400	64,600	71,800
Expressway	4	32,700	36,800	40,900
Expressway	6	49,000	55,200	61,300
Expressway	8	65,400	73,500	81,700
Freeway	4	61,200	68,900	76,500
Freeway	6	94,000	105,800	117,500
Freeway	8	128,400	144,500	160,500
Freeway	10	160,500	180,500	200,600
Ramp <sup>(4)</sup>	1	16,000	18,000	20,000

**Notes:** (1) All capacity figures are based on optimum conditions and are intended as guidelines for planning purposes only.  
 (2) Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables as defined in the Riverside County Congestion Management Program.  
 (3) Two-lane roadways designated as future arterials that conform to arterial design standards for vertical and horizontal alignment are analyzed as arterials.  
 (4) Ramp capacity is given as a one-way traffic volume.

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