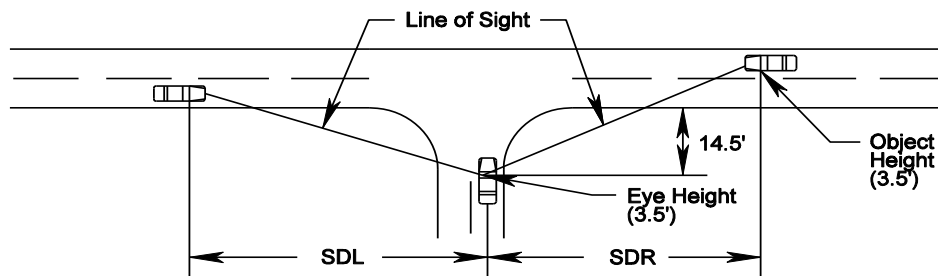


Intersection Sight Distance

The following table shows intersection sight distance requirements for various speeds along major roads:



SDR = Sight Distance Right (For a vehicle making a left turn)
 SDL = Sight Distance Left (For a vehicle making a right or left turn)

Height of Eye 3.5'		Height of Object 3.5'									
Design Speed (mph)**	20	25	30	35	40	45	50	55	60	65	70
In Feet	225	280	335	390	445	500	555	610	665	720	775
SDR: 2 Lane Major Road	225	280	335	390	445	500	555	610	665	720	775
SDL: 2 Lane Major Road	195	240	290	335	385	430	480	530	575	625	670
SDR: 4 Lane Major Road (Undivided) or 3 Lane	240	295	355	415	475	530	590	650	710	765	825
SDL: 4 Lane Major Road (Undivided) or 3 Lane	225	280	335	390	445	500	555	610	665	720	775
SDR: 4 Lane Major Road (Divided – 18' Median)	260	325	390	455	515	580	645	710	775	840	905
SDL: 4 Lane Major Road (Divided – 18' Median)	245	305	365	425	490	550	610	670	730	790	850
SDR: 5 Lane Major Road (continuous two-way turn-lane)	250	315	375	440	500	565	625	690	750	815	875
SDL: 5 Lane Major Road (continuous two-way turn-lane)	240	295	355	415	475	530	590	650	710	765	825
SDR: 6 Lane Major Road (Divided – 18' Median)	275	340	410	480	545	615	680	750	820	885	955
SDL: 6 Lane Major Road (Divided – 18' Median)	260	325	390	455	515	580	645	710	775	790	850
SDL: (Where left turns are physically restricted)	195	240	290	335	385	430	480	530	575	625	670

TABLE 2-7 INTERSECTION SIGHT DISTANCE

Source: AASHTO Green Book (See Exhibits 9-54 thru 9-57)

**For all tables, use design speed if available, if not use legal speed.

Note: Both SDR and SDL must be met at the intersection, unless left turns are physically restricted by a median or channelization island; then only SDL is needed.

The term "Major Road" refers to the road with the higher functional classification, or if both have the same classification, the road with the higher volume.

Intersection sight distance does not control the access spacing for entrances and intersections shown in Table 2-2.

For major roadways of more than four lanes, large truck volumes on a minor road or crossover, or median widths over 60', see AASHTO's A Policy on Geometric Design of Highways and Streets.

The designer must check each intersection to insure that adequate sight distance is provided. On a typical two-lane road horizontal curve there are numerous objects that restrict sight distance such as cut slopes, buildings, vegetation, vehicles, etc.

These obstructions should be considered when reviewing commercial entrances. A divided highway can have similar problems. It is very important to obtain adequate commercial entrance sight distance from the entrance as well as the left turn position into the entrance. A design exception must be granted by the State Location and Design Engineer (or designee), and if applicable, the Federal Highway Administration for deviations from required sight distance standards.

The Intersection Sight Distance values in the table above permit a vehicle stopped on a minor road or crossover, to cross the major road safely or merge safely in the case of turns.

The Intersection Sight Distance table above is based on the following criteria:

The AASHTO Green Book shows that it requires 7.5 seconds for a passenger car to turn left onto a two-lane road. For a passenger vehicle to turn right into the first lane, the Green Book shows that only 6.5 seconds is required because drivers making right turns generally accept gaps that slightly shorter than those accepted in making left turns.