

DETERMINING SCHOOL BUS ROAD TRAVEL (TRN-P039)

Clarksville-Montgomery County School System

1.0 SCOPE:

- 1.1 This procedure outlines the process for determining the suitability and safety of roads and turn-arounds for school bus travel.

The online version of this policy is official. Therefore, all printed versions of this document are unofficial copies.

2.0 RESPONSIBILITY:

- 2.1 Driver Safety Supervisor (DSS)
- 2.2 Assistant Student Transportation Manager (ASTM)
- 2.3 Student Transportation Manager (STM)
- 2.4 Routers/Dispatch Assistant (RDA)

3.0 APPROVAL AUTHORITY:

- 3.1 Chief Operations Officer (COO)

4.0 DEFINITIONS:

- 4.1 Public Right-of-Way (R.O.W.): The area of real property in which the City or County has a dedicated or acquired right-of-way interest in the real property. It shall include the area on, below or above the present and future streets, alleys, avenues, cul-de-sacs, turn-arounds, roads, highways, parkways or boulevards dedicated or acquired as right-of-way.
- 4.2 Edge of the road: The edge of the road is defined by a curb face, white fog line, or in the absence of the proceeding marks, the actual edge of the road.
- 4.3 Minimum road width: The minimum road width is measured from the curb face to curb face. In the event there is not a curb, the measurement will be from the edge of the road to the edge of the road. Minimum road width must be 17'.
- 4.4 Minimum cul-de-sac width: The minimum cul-de-sac radius is measured from the center point of the cul-de-sac to the curb face. In the event there is not a curb, the measurement will be from the center point to the edge of the cul-de-sac. Minimum cul-de-sac width is 90' with a radius of 45'.
- 4.5 "T" junction (Hammerhead): The lane of travel ends where it meets a perpendicular road.
- 4.6 "Y" junction: The lane of travel ends and splits into two dead end roads.
- 4.7 Turn-around: Any place a school bus turns around and goes back the direction it came from.
- 4.8 Stopping sight distance: The distance a motorist on a roadway should be able to see a stopped vehicle and come to a complete stop. See Table 1 and Table 2 for distances.

5.0 PROCEDURE:

- 5.1 The router, or designee, will send a School Bus Safety Request Checklist (TRN-F071) to the Driver Safety Supervisor (DSS).
 - 5.1.1 The request must include, at a minimum, the name(s) of the road(s), the turn-around location, or bus stop to be checked along with the concern.

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5.2 The DSS or designee will then perform a safety check to ensure the school bus can safely travel the requested road(s) or turn-around.

5.2.1 All requests will be checked for compliance with the standards listed in paragraphs 6.1 – 6.6 and 7.1 – 7.4.

5.2.2 Findings will be documented on the School Bus Safety Request Checklist (TRN-F071).

5.2.3 At the completion of the check, the DSS will inform the router of the decision along with the School Bus Safety Request Checklist (TRN-F071).

5.2.4 Once routers are notified by the DSS of the determination, the router will make any necessary changes, if requested, to the route.

6.0 ROADS AND TURN-AROUND REQUIRED DISTANCES:

6.1 All roads serviced by CMCSS buses must have a minimum road width of 17' as defined in paragraph 4.4.

6.2 The minimum cul-de-sac turn-around radius must be 45' as defined in paragraph 4.5. Cul-de-sac length not to exceed 1,000'.

6.3 A "T" junction turn-around must have 50' of roadway in either direction on the perpendicular road as measured from the center of the road the bus travelled.

6.4 A "Y" junction turn-around must have 50' of roadway in each leg of the intersection as measured from the point of intersection.

6.5 Any turn-around that requires a school bus to be backed into a secondary road must have a minimum of 40' of roadway plus an additional unobstructed 10' as measurement from the junction of the secondary road and the primary road. Additionally, the opening of the secondary road must be a minimum of 17' wide.

6.6 All turn-arounds must be on a publicly owned R.O.W.

7.0 BUS STOP SAFETY

7.1 Student bus stops will not be assigned in curves of roads without sufficient stopping sight distance. Additionally, student stops will not be permitted on downgrades or upgrades that do not have sufficient stopping distance. Alternate student bus stops will be assigned as close to the student's home as practical, allowing for sufficient stopping distance as defined in Table 1 or Table 2.

7.2 Student bus stops may be less than 200' apart in areas where there is not a safe and designated walking path for students to walk to their destination.

7.3 Students will not be permitted to cross the street in front of the bus where the stopping sight distance does not comply with the standards in Table 1 or Table 2.

7.4 Any turn-around that requires a bus to travel into the on-coming lane of traffic will not be permitted if there is not sufficient stopping sight distance in accordance with Table 1 or Table 2.

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Table 1¹

SIGHT DISTANCE

US Customary			
Design Speed (mph)	Brake ¹ Reaction Distance (ft)	Braking ² Distance On Level (ft)	Design SSD (ft)
20	73.5	38.4	115
25	91.9	60.0	155
30	110.3	86.4	200
35	128.6	117.6	250
40	147.0	153.6	305
45	165.4	194.4	360
50	183.8	240.0	425
55	202.1	290.3	495
60	220.5	345.5	570

Reference:

U.S. Department of Transportation – Federal Highway Administration *Manual on Uniform Traffic Control Devices*

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Table 2²

SIGHT DISTANCE

US Customary						
Design Speed (mph)	Design SSD (ft)					
	Downgrades			Upgrades		
	3%	6%	9%	3%	6%	9%
20	116	120	126	109	107	104
25	158	165	173	147	143	140
30	205	215	227	200	184	179
35	257	271	287	237	229	222
40	315	333	354	289	278	269
45	378	400	427	344	331	320
50	446	474	507	405	388	375
55	520	553	593	469	450	433
60	598	638	686	538	515	495

Table information comes from:

Illinois Department of Transportation of Transportation Bureau of Local Roads and Streets. Retrieved from <https://idot.illinois.gov/Assets/uploads/files/Doing-Business/Manuals-Split/Local-Roads-and-Streets/Chapter%2028.pdf><https://idot.illinois.gov/Assets/uploads/files/Doing-Business/Manuals-Split/Local-Roads-and-Streets/Chapter 28.pdf>

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Table 3³

**TABLE 4.1
CITY AND COUNTY RIGHT-OF-WAY REQUIREMENTS
TWO-WAY WITH CURB AND GUTTER**

	Residential							Non-Residential
	Alley	Short Cul-de-sac (f)	Cul-de-sac		Minor Local	Major Local	Sub-Collector	Sub-Collector
Number of Lots(a)	N/A	10 or less	25 or less	26 to 75	75 or less	76 to 160	Over 160	N/A
Length Not to Exceed	500 feet	500 Feet (City) 750 Feet (County)	750 Feet	1000 Feet (c)	1500 Feet	1500 Feet	1500 Feet	1500 Feet
Right-Of-Way Width	20 feet	40 Feet	40 Feet	40 Feet (c)	40 Feet	50 Feet	50 Feet or greater (d)	50-60 Feet (e)
Pavement Width (b)	18 feet	20 Feet (f) (g)	24 Feet (g)	28 Feet (g)	24 Feet (g)	28 Feet	28 Feet or greater (d)	28-36 Feet (e)
Cul-de-sac Right-of Way (radius)		45 Feet (City) 40 Feet (County)	50 Feet	50 Feet				
Cul-de-sac Pavement Width (radius)		40 Feet (City) (g) 36 feet (County) (g)	45 Feet (g)	45 Feet (g)				

Table information comes from:

Clarksville-Montgomery County Regional Planning Commission, Subdivision Regulations, Revised March 2021. Retrieved from <https://www.cmcrpc.com/subdivisions>.



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8.0 REVISION HISTORY:

<u>Date:</u>	<u>Rev.</u>	<u>Description of Revision:</u>
4/30/21		Initial Release
9/24/21	A	6.2 Added "Cul-de-sac length not to exceed 1,000'. Added Table 3.

9.0 Associated Documents

- 9.1 School Bus Safety Request Checklist ([TRN-F071](#)).