Roadway Design Manual Webinar # 1 (Q&A) 12-12-2024

Scott Cunningham: Use of Intersection Sight Distance instead of Stopping Sight Distance on TxDOT roadway. Since TxDOT does not control the side street, why not SSD.

General discussion on Intersection Sight Distance which although not a controlling criteria should be calculated at every intersection (Ref. RDM 4.11.4, 13.5). The AASHTO GB guidance for calculating intersection sight distance for different cases has been added to the RDM. Considerations for Intersection Sight Distance are also provided for different types of Alternative Intersections (Ch. 14). For driveways, to the extent tenable, intersection sight distance should be considered.

Kazandra Cavazos: I thought I heard you mention that there will be an updated DSR that will work with the new RDM. When is that expected to come out?

The current project target date for the updated DSR is Feb. 2025.

Miguel Cortez: What is the definition of operating speed?

Operating speed is the speed at which drivers are observed operating their vehicles during free-flow conditions. The 85th percentile of the distribution of observed speeds is the most frequently used measure of the operating speed associated with a particular location or geometric feature (Ref. RDM 4.2.1).

Kazandra Cavazos: Most manuals we have can be opened in an internet version and a pdf version. I noticed that there only seems to be a pdf version of the new RDM. Will an internet version be posted?

The recent updates to the Design Division Manuals, including the RDM, were done in a user friendly, interactive ebinder PDF format. A vendor is being procured to in the future provide an HTML version of the respective Manuals.

Kazandra Cavazos: The link to the RDM in our Manual system goes to the new RDM. Is there a link we can go to pull up the most recent RDM we had been using?

Please see link below:

https://crossroads/divisions/des/sections/project-delivery/design-support/roadway-resources.html

Scott Cunningham: When doing context design, if we have a rural existing but going to future residential subdivision containing 2000 plus homes, do we use the future context for design?

I think this question is in reference to driveway(s) in particular. Since driveways are generally shorter term than a standard TxDOT project, the procedures in the TxDOT TSAP Manual (Ch. 16) would be used in determining the approach that would be needed for this type of development.

For a standard TxDOT roadway project, the projected context of the roadway is a consideration in context determination, particularly for areas where significant growth is anticipated. Slide 18 of the Webinar references the TxDOT ArcGIS tool that may be used to see existing, intermediate, and future year contexts.

Miguel Cortes provided link:

See the attached memo. Is this memo considered or referenced in the new RDM?

2015-relationship-between-design-speed-posted-speed-10-07-2015-fhwa.pdf

The intent of having a Target speed is to establish a speed that the designer <u>intends</u> for the drivers to use. The Design speed is a selected speed used to determine the various geometric design features of the roadway. In general, the target speed for rural roadways should be on the higher end of the Design Speed range. For Urban Roadways, consider starting with target speeds on the lower end of the design speed range. After the project is built, the Operating speed is the speed at which drivers are observed operating their vehicles during free-flow conditions. The 85th percentile of the distribution of observed speeds is the most frequently used measure of the operating speed associated with a particular location or geometric feature. The posted speed is then established by the procedures in the *TxDOT Procedures for Establishing Speed Zones Manual*. The 85th percentile operating speed is the typical baseline used for establishing speed limits, but there are variations of this allowed per the Speed Zones Manual for certain circumstances. The topic of speed in the RDM represents more recent guidance from FHWA; additionally an RTI research report should be completed in January 2025 which will provide additional information on the establishment of Target speeds.

Mohammad Bari: Could you please elaborate on the relationship between the 85th percentile speed and the posted speed limit? What is the correlation between the two?

See previous response.

Mahi Naga: If the project is delayed to let for more than 4 to 5 years from the design completion, should the design be reevaluated based on the changed context, given that the corridor would be changed mostly from rural to sub-urban setting in this 5 yrs?

A reevaluation would be recommended in this case particularly if projected growth and change in context is anticipated in the project limits. Please see previous response on the availability of the TxDOT ArcGIS Tool.