

INTERCHANGE SPACING REQUIREMENTS

By John Pickering
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NOTE: ALL DISTANCES ARE MEASURED ALONG THE MAIN LINE FROM CROSSROAD TO CROSSROAD.

FROM AASHTO GREEN BOOK:

2004 Edition (English/Metric) -- It says, "A general rule of thumb for minimum interchange spacing is 1 mile in urban areas and 2 miles in rural areas. In urban areas, spacing of less than 1 mile may be developed by grade-separated ramps or by adding collector-distributor roads."

Summary: Urban Areas -- 1 mile
Rural Areas -- 2 miles

FROM AASHTO, "A POLICY ON DESIGN STANDARDS -- INTERSTATE SYSTEM":

January, 2005 Edition – It says, "As a rule, minimum spacing should be 1 mile in urban areas and 3 miles in rural areas, based on crossroad to crossroad spacing. In urban areas, spacing of less than one mile may be developed by grade-separated ramps or by collector-distributor roads."

Summary: Urban Areas -- 1 mile
Rural Areas -- 3 miles

FROM MDOT PLANNING DIVISION:

As a general rule, they have used the 1 mile in urban areas and 3 miles in rural areas.

FROM MDOT ROADWAY DESIGN DIVISION:

We have used the 1 mile and 2 miles as a general rule; however, our 2001 Design Manual says the following:

- Urban Areas -- 1 mile
- Rural Areas -- Interstate System - 3 miles
Other than Interstate - 2 miles

Roadway Design Division intends to follow the guidelines as stated above in our Design Manual as a general rule; however, there can be exceptions to the guidelines with a capacity analysis giving an acceptable level of service due to one-sided interchanges or ramp braiding. The Roadway Design Manual actually follows the guidelines provided from AASHTO, as stated above.