

After receipt of information, the design is to be finalized to the extent necessary to determine justification to construct. The construction estimate, including additional right of way (see Form CE7) and maintenance (annual cost per mile (kilometer) x length x 2) is to be compared to the damage figure shown in column 5, Form CE7. Since the annual cost per mile (kilometer) for maintenance will vary from county to county and year to year, the Asset Management Division is to be consulted. To arrive at the maintenance cost, the annual cost per mile (kilometer) x length is doubled in consideration of two treatments within 10 years.

Projects with Federal Highway Administration participation require concurrence prior to construction. A set of prints transmitted by letter stating the estimated cost, accompanied by a copy of Form CE7 is to be submitted requesting approval. A copy of this request is to be retained in the project file.

Whenever a service road or other road, which is to be maintained by others, is to be constructed in a municipality or in the two counties, which maintain their own networks, the construction is to conform to the requirements, both structural and geometrical, of the particular city or county. Full Federal Highway Administration approval is also to be obtained for this work and the design should be an integral part of the plans from the earliest stage.

### **OPERATIONAL / CAPACITY ANALYSIS\***

If the project has been through the location study stage, the capacity stage checks previously documented should be reviewed and updated if necessary.

For projects that have not been through this stage, the capacity analysis as indicated in [Section 2B-3-DETERMINATION OF ROADWAY DESIGN](#) should be performed.

In addition, the designer should now proceed with the following:

Major at-grade intersection capacity checks:

1. Overall intersection level of service.
2. Level of service for each approach.
3. Number and length of turning lanes.
4. Pedestrian and bicycle influence.

Interchange capacity checks:

1. Basic ramp level of service.
2. Ramp termini level of service.
3. Entrance - exit levels of service.
4. Weave - merge lengths and widths.
5. Acceleration - deceleration lane lengths.

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\* Rev. 1/12