

APPENDIX A TRIP Grading Scale

The following scale is used to rate key components of a region's road, highway and bridge network. The following are the variables used for individual ratings.

Roads: The letter grade assigned to a state or region's roads is based on the percentage of roads rated in poor or mediocre condition. The number corresponding to the actual percentage of roads rated in poor condition is doubled for scoring purposes, then added to the percentage of roads in mediocre condition. Thus, a region with 15 percent of roads rated poor and 10 percent of roads rated in mediocre condition would get a score of 40 for rating purposes ($\{15 \times 2\} + 10 = 40$) and a grade of "C".

Bridges: The letter grade assigned to a state or region's bridges is based on the percentage of bridges that are structurally deficient and functionally obsolete. The number corresponding to the percentage of bridges that are structurally deficient is doubled for scoring purposes, then added to the percentage of bridges that are functionally obsolete. Thus, a region with 15 percent of its bridges rated structurally deficient and 10 percent rated functionally obsolete would get a score of 40 for rating purposes ($\{15 \times 2\} + 10 = 40$) and a grade of "D".

Congestion: The letter grade assigned to a state or region's level of congestion is based on the percentage of urban highways that are considered congested. Highways are considered congested if their volume of traffic is rated either D, E or F in terms of standardized level of service ratings or if their traffic volume is 0.8 or higher on the volume-service-flow ratio, which compares traffic levels to a road or highway's total maximum design capacity. Additional data such as congestion on key routes or anticipated increases in traffic volume may also be reflected in the grades.

Safety: The letter grade assigned to traffic safety in a state or region is based on the annual number of traffic fatalities per 100,000 persons. Additional information such as a region's fatality rate per 100 million vehicle miles of travel and differences between urban versus rural routes, and routes with high crash rates may also be reflected in the grade. Based on these criteria, a region with a traffic fatality rate of 10 fatalities per 100,000 persons would be assigned a grade of "C".

| | Pavement | Bridges | Congestion | Safety |
|----------|-----------------|----------------|-------------------|---------------|
| A | 0-15 | 0-12 | 0-10 | 0-4 |
| B | 16-30 | 13-24 | 11-25 | 5-8 |
| C | 31-45 | 25-36 | 25-40 | 9-12 |
| D | 46-60 | 37-48 | 41-60 | 13-16 |
| F | 61+ | 49+ | 61+ | 16+ |