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16. Abstract Research was performed to determine the value of public rest areas in Michigan, including welcome centers. A benefit/cost (B/C) economic analysis procedure was utilized to assess rest areas both individually and as a system. The benefits associated with rest areas included: travel diversion cost savings, comfort and convenience benefits, increased tourism spending (welcome centers only), and crash reductions. The costs associated with rest areas included amortized construction costs, operating costs, and routine maintenance costs. The results of the economic analysis showed that nearly all MDOT rest areas currently possess B/C ratios that exceed 1.0. The systemwide B/C ratio was estimated at 4.56 with individual values for the 81 facilities ranging between 0.78 and 11.66. A majority of the benefits originated from a combination of comfort/convenience (i.e., the "value" to users), reduction of targeted fatigue-related crashes (estimated at 3.37 crashes per facility per year) and tourism benefits (welcome centers only). The facilities with the highest B/C ratios included heavily utilized facilities located on major limited-access freeways in the lower peninsula of Michigan. The facilities with the lowest B/C ratios were underutilized facilities with high operation and maintenance costs – particularly facilities located in northern Michigan and especially those that are closed during winter months. A value index for overall prioritization of rest area facilities was computed for each facility considering the B/C ratio along with several non-economic functional factors. To provide flexibility for future forecasting and planning, a software tool was developed to allow for estimation of the impacts associated with the removal of an existing facility or addition of a new facility to the network.			
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