Abstract:

Because of rising levels of traffic congestion and rising costs for new road construction, transportation officials are increasingly interested in access management techniques and projects. Access management is the process of carefully managing the dual role that arterial highways, roads, and streets play in serving through traffic and providing access to property and land development. Providing inappropriate or excessive access to property along arterial roadways can lead to increases in traffic accidents, delays, and congestion. When property access is managed carefully, potential conflict points are reduced. This in turn leads to enhanced safety, and improved roadway operations.

The Iowa Access Management Awareness Program Phase II report presents the results of a number of detailed Iowa access management case studies. Case studies were selected to provide a cross-section of locations and community sizes in Iowa as well as a variety of project types. Generally, access management projects completed during the mid-1990s were chosen as case studies. Projects ranging from driveway consolidation to full raised medians were analyzed on a before and after basis in terms of traffic safety, traffic operations, and adjacent business vitality. Sources of information used for the case study analysis included: road project files; traffic accident records; state sales tax records; and personal interviews of business owners, business customers, and local officials.

The case study results from Iowa essentially confirm results of previous access management research from around the nation. Recent access in Iowa had significant, positive impacts in terms of traffic safety. The average reduction of annual accidents and accident rates on improved roadways was approximately 40 percent. Improvements in access management also led to significantly better roadway operations for most case studies. Although a small number of individual businesses do report sales losses and/or customer complaints once projects have been completed, access management projects in Iowa have not had an adverse impact on the majority of businesses located along them. In fact, some access management projects in Iowa seem to have contributed to an improved business environment along the corridors that have been improved.

The results from the Iowa case studies presented in this report will be used to develop access management education materials for Iowa transportation professionals and other audiences interested in the impacts of access management.