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Freight and Logistics

UNDERSTANDING COMMERCIAL TRUCK USE THROUGH DOWNTOWN BOZEMAN

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Located in southwestern Montana, Bozeman has a population of just under 40,000. Downtown Bozeman is a thriving central business district that has home to over 200 stores, restaurants, and offices with over 3,000 employees. The downtown area is a community gathering place that features 50 public events each year ranging from music concerts to parades. Downtown Bozeman was designated as a historic district on the National Register of Historic Places, and contains over 794 buildings dating between the 1880's and 1930's.

The primary objective of the project was to gain a better understanding of the commercial truck use of the primary arterial through downtown Bozeman (Main Street/US 191). City officials and local business owners have a perception that Main Street is heavily used by commercial trucks. The use of Main Street by commercial trucks conflicts with the interest of Main Street functioning as a livable, bikeable destination.

The project identified the magnitude of use of Main Street by commercial trucks, as well as investigated other potential routes for the trucks. To do so, two video trailers were deployed for about a week and a half, recording approximately 264 hours of video. The numbers of "through trucks," large commercial trucks that cross from East Main Street to West Main Street in a reasonable amount of time without any stops or detours, were counted.

The data showed that while a larger number of through trucks traverse Main Street on weekdays than on weekends, the proportion of through trucks is lower during the week. The peak period was identified as 2 to 3pm. The average proportion of through truck traffic is 29%. When compared with other potential routes, Main Street was found to have the highest travel time. Therefore, an alternative route was identified for the commercial trucks to traverse.