

CHAPTER 1 - INTRODUCTION

The Kansas Department of Transportation (KDOT) and the Unified Government of Wyandotte County and Kansas City, Kansas (UG) retained GBA to complete a regional transportation master plan of traffic operations and geometric needs along the I-70 and I-435 corridors near the Village West region of western Wyandotte County. The study area was generally bounded by Donahoo Road to the north, Kansas Avenue to south, K-7 to the west, and 78th Street to the east. **Figure 1.1** and **Figure 1.2** detail the general location of the study area within western Wyandotte County, Kansas.

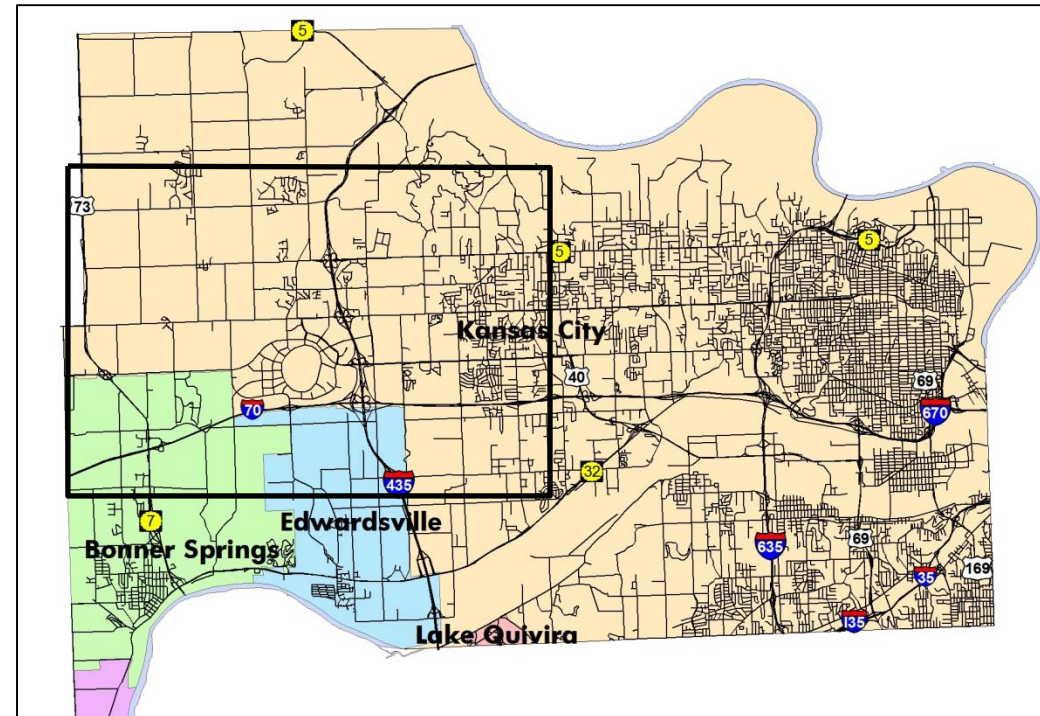


Figure 1.1 - Wyandotte County Street Map

The ultimate goal of this study was to produce an area-wide projection of expected development impacts, and prepare a roadway improvement master plan which KDOT and the local governments can implement in order to create and maintain desirable levels of service and safety on I-70, on I-435, and at major interchanges and critical intersections within the transportation study area.

There are a large number of significant existing land uses within the Village West region of Wyandotte County, including the Kansas Speedway complex, the Legends commercial and entertainment district, the T-Bones minor league baseball stadium, and numerous retail developments such as Target, Wal-Mart Supercenter, JC Penney, Cabela's, and Nebraska Furniture Mart. In addition to these existing land uses, development activities continue with the construction of a new 16,000-seat soccer stadium for the Kansas City Wizards, the groundbreaking for the Hollywood Casino at the Kansas Speedway, the planned construction of an 18-field soccer-only practice / play complex in the Wyandotte County Park within Bonner Springs, and the construction of a major office complex for between 4,000 and 6,000 employees of the Cerner Corporation.

Even with these planned major new developments, over 8,000 acres of low-density, undeveloped, and / or agricultural property remains available within the study area for continued commercial, entertainment, office, and residential growth. These 8,000-plus acres are located in the western half of the study area within western Wyandotte County / Kansas City, KS; northern Bonner Springs; and northern Edwardsville. As shown in Figure 1.2, large areas within the study boundaries are currently underdeveloped and would be expected to infill with normal suburban type land uses, as well as destination retail and entertainment type developments more closely matching the Village West / Legends commercial and entertainment district, as shown **Figure 1.3**.

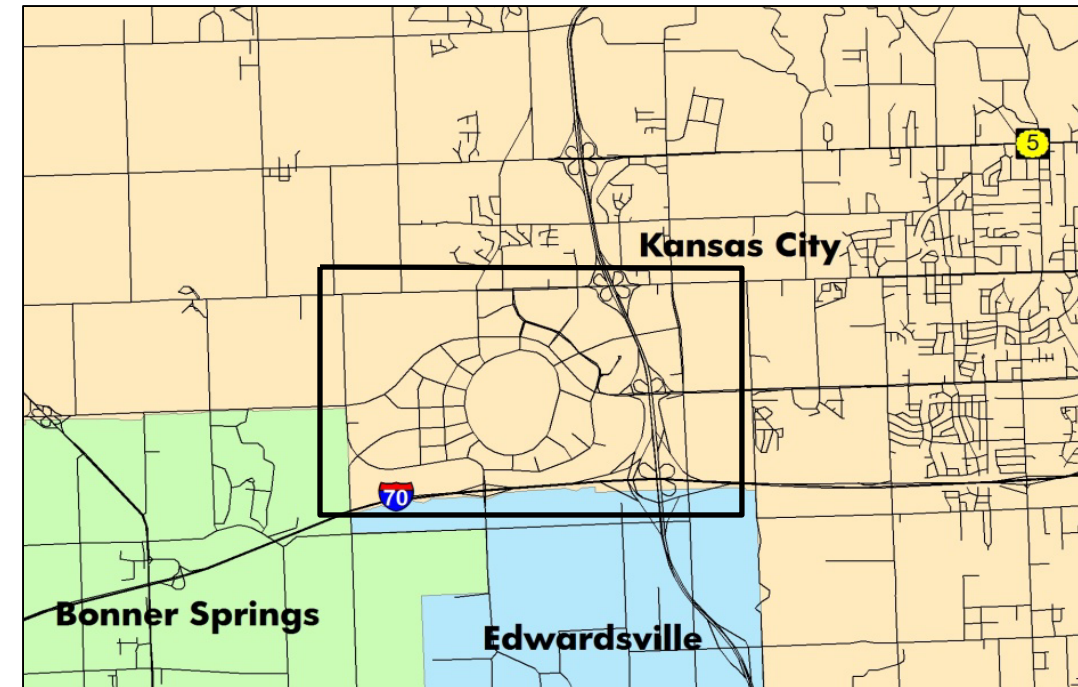


Figure 1.2 - Regional Transportation Master Plan Study Area

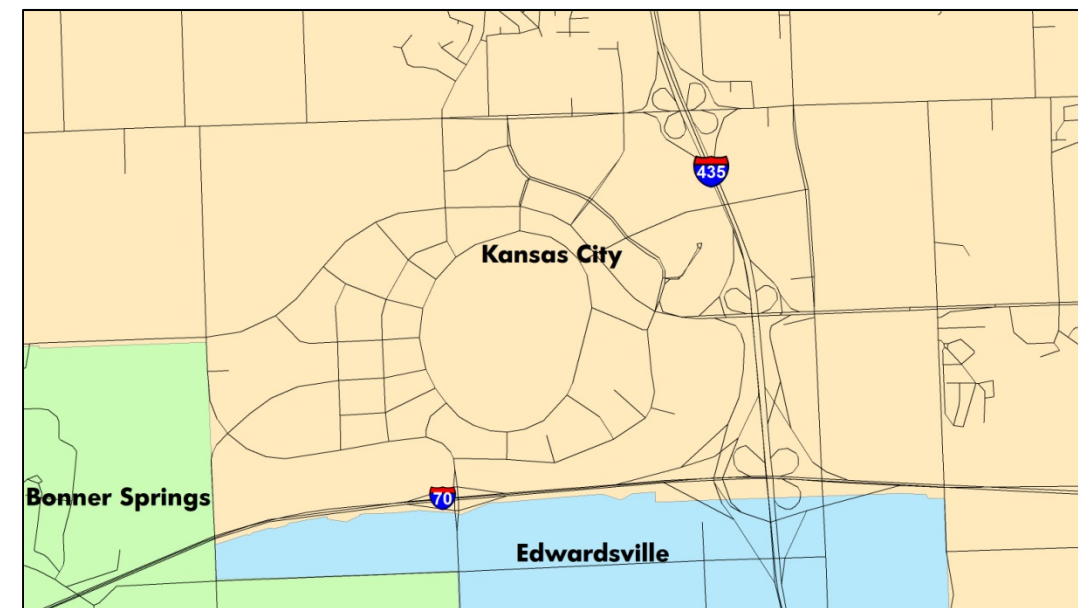


Figure 1.3 - Village West / Legends Commercial and Entertainment District

The tasks completed for this project included supplementing existing KDOT, UG, and other available traffic data by conducting both machine and manual traffic counts at critical locations during the weekday PM peak hour and the Saturday peak hour, creating a VISUM traffic demand model of the existing roadway network and existing land uses for the weekday PM peak hour and Saturday peak hour, and meeting with local stakeholders to determine future land use assumptions and patterns to develop land use projections for Design Year 2040 and Full Build-out scenarios. Once these initial tasks were completed, detailed evaluations of critical locations and corridors that would affect the overall traffic operations region-wide were completed, and are summarized in the following chapters of this report.