Updating the Lane Closure Guide for Urban Highways in the Kansas City Metropolitan Area
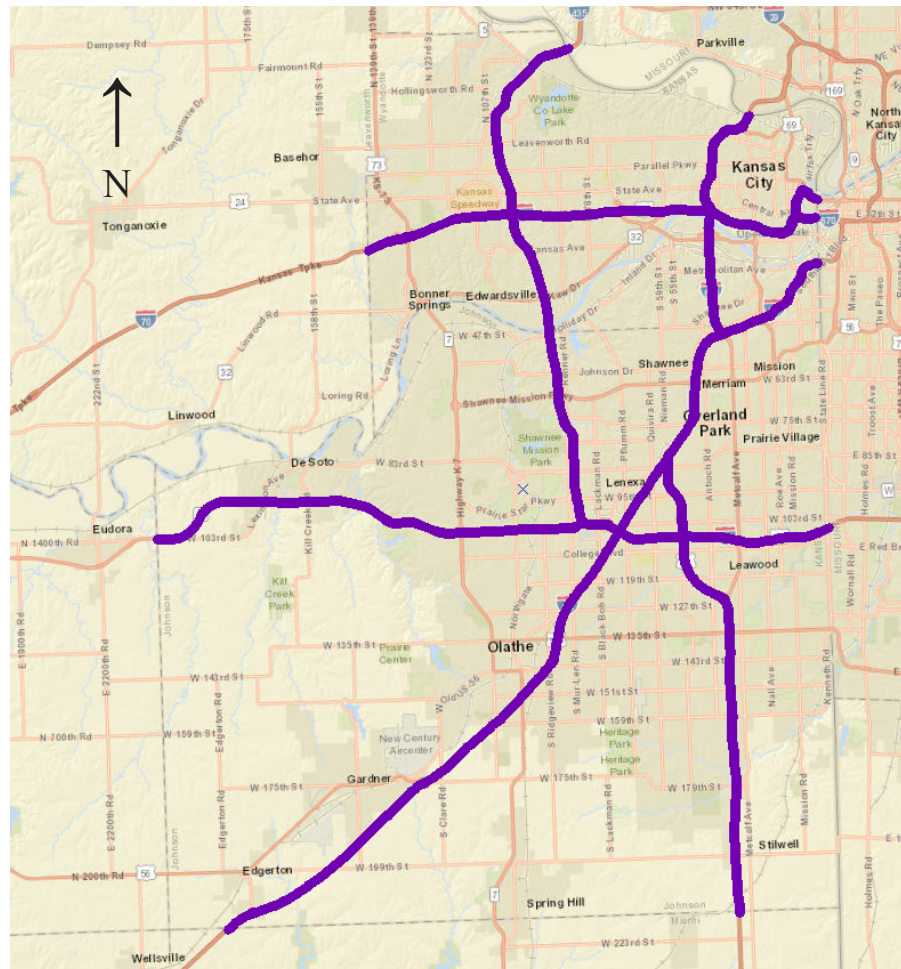
Eric J. Fitzsimmons, Ph.D., P.E.
Benjamin G. Nye
Sunanda Dissanayake, Ph.D., P.E.

Kansas State University Transportation Center

Introduction

Each year short- and long-term work zones are put into place to allow for maintenance and rehabilitation of highways. However, work zones can have a significant impact on traffic flow. To reduce the impacts of work zones, KDOT developed a Lane Closure Guide (LCG) to recommend times during a day a lane could be shut down for construction. The existing Lane Closure Guide was developed on limited information and estimations of traffic volumes.

KDOT Lane Closure Guide Coverage Area

KANSAS Department of Transportation

TECHNICAL SUMMARY

Project Description

The objective of this research was to evaluate the existing LCG, survey other highway agencies on lane closure guidance and work zone capacities, and to update the LCG with current traffic management center data.

Project Results

The LCG was updated based on the most current data, and a QC/QA process was developed to check the consistency and accuracy of the LCG. As well, the literature review confirmed that the work zone capacity KDOT uses for lane closures falls within the acceptable range used by other State DOTs. Two recommendations have been developed as a result of this research: (1) a program should be developed that can automatically update the LCG each year or in real time; and (2) gaps in data coverage should be updated when additional information is available or obtained from counters placed in areas that previously lacked counters.

Project Information

For information on this report, please contact Eric J. Fitzsimmons, Ph.D., P.E.; Kansas State University, 2109 Fiedler Hall, Manhattan, KS 66506; (785) 532-0889 phone; fitzsimmons@k-state.edu.

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