



# Kansas DOT Statewide ITS Project

KA-5777-01

Location: Multiple Counties



5/3/2023

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- 03** Automated Gate System
- 04** Dynamic Curve Warning System
- 05** Current Status



01

Our Roles



KDOT – Shari Hillard, PE  
ITS Bureau Chief

**TRANSYSTEMS**

Preliminary/Construction Engineering Services

TranSystems – Chad Banka PE, PTOE



JEO Consulting



GEOTECHNICAL

GSI Engineering



Embedded Services

HDR – Taylor McHenry, PE



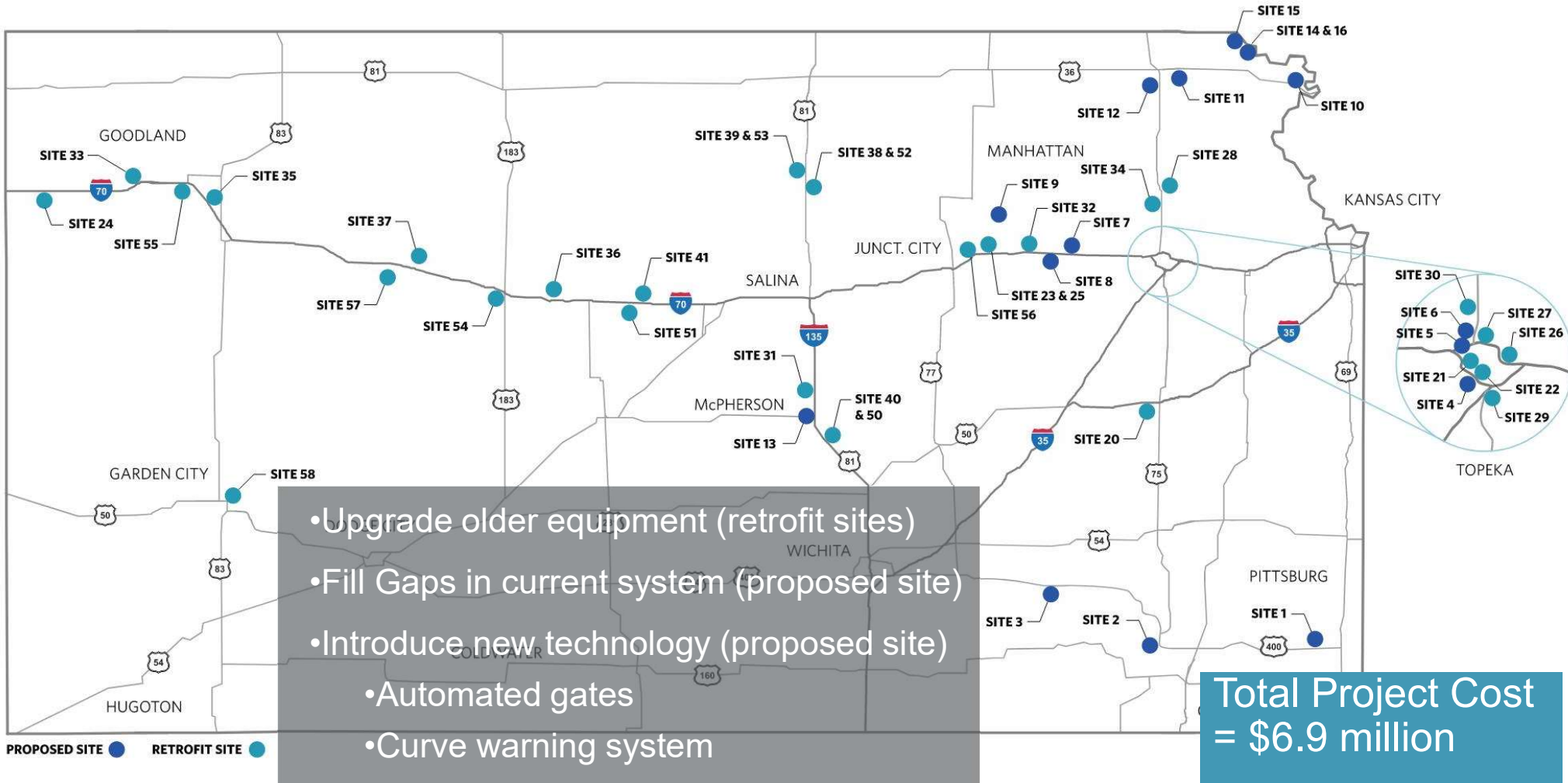
PHILLIPS SOUTHERN  
Electric Co, Inc.

Contractor

# 02

## Project Overview

# Project Overview - Statewide ITS Infrastructure





# 03

## Automated Gates

# Automated Gate System

## Re-evaluate location & need

- March 2019 flooding
- NE Kansas
- Long-term blocked access

## White Cloud, KS

- On the Missouri River
- Difficult to access, remote, long detours





# Automated Gate System



# Automated Gate System

## JEO Consulting

- Lonnie Burklund & Mark Friend
- Experience with ITS & gates

## Objectives

- Remotely controllable (through ATMS)
- Quickly deployable in rural areas
- MUTCD compliant
- Testing for future locations
  - High & low speeds

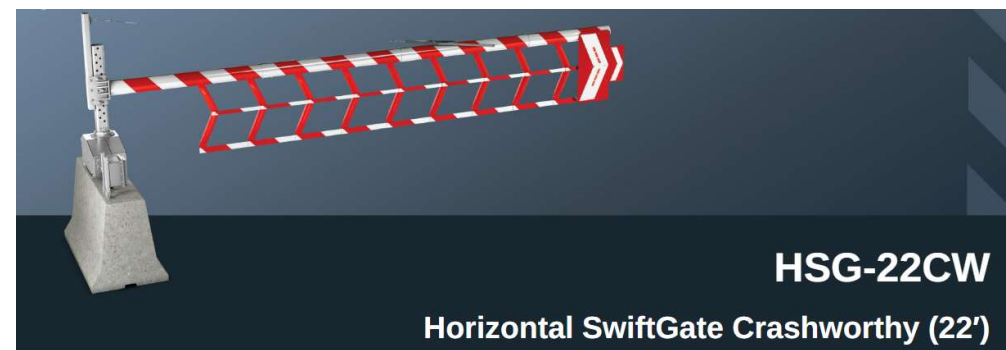
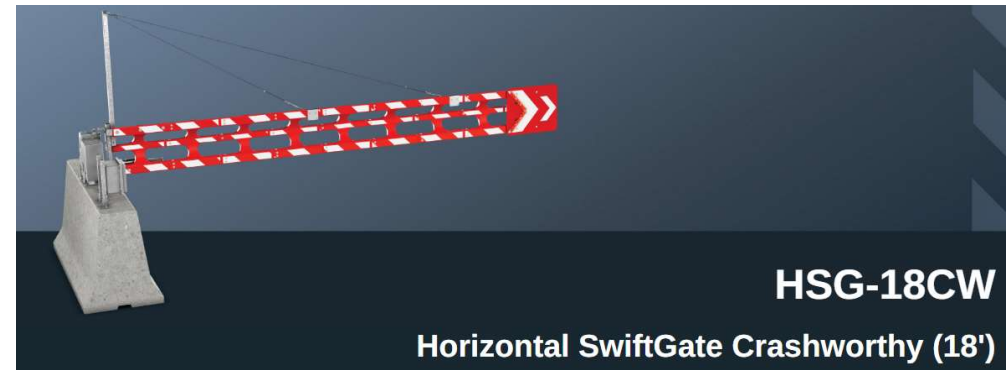


# Automated Gate System

## Preferred Vendor

Versilis, Inc.

- Horizontal & vertical swing options
- Used in US and Canada
  - Florida and Texas
- Compatible with ATMS software
- Contacted other TMCs





# 04

## Dynamic Curve Warning

# Dynamic Curve Warning System



Located at K-61 & I-135

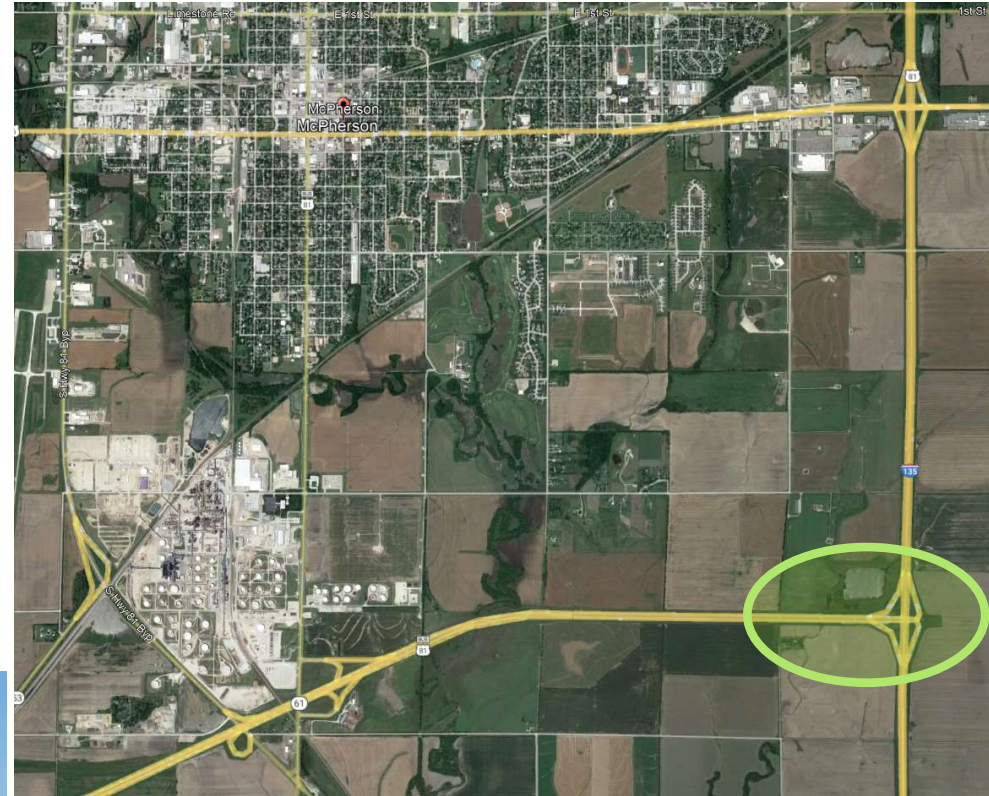


Temporary solution

- No geometric improvements



Truck traffic



# Dynamic Curve Warning System

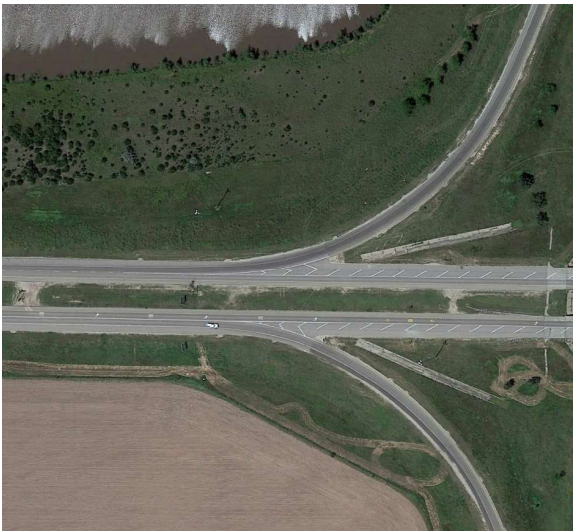
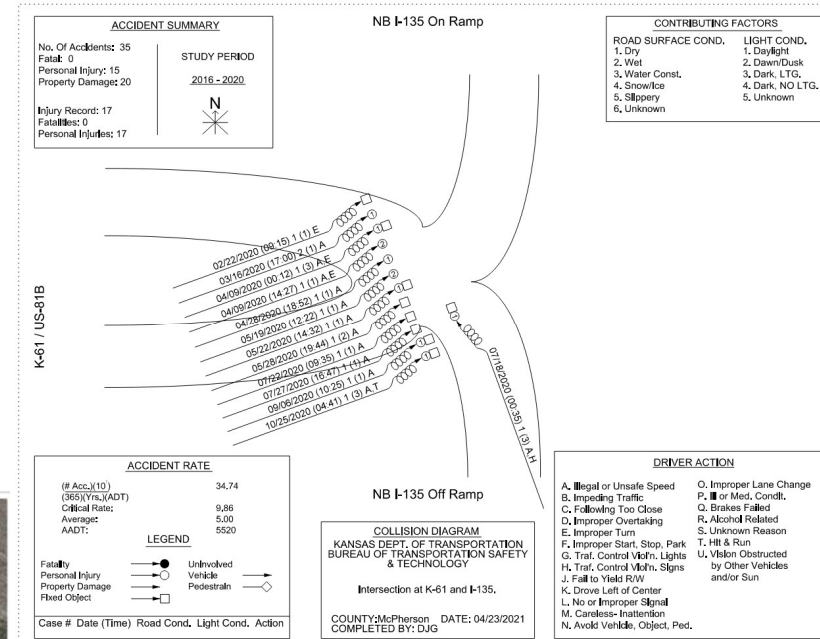


Existing crashes

- Design does not always work



Traffic study



# Dynamic Curve Warning System

NB K-61 to I-135 – Existing conditions



# Dynamic Curve Warning System

## Safety

- Temporary Solution
- Make the change

## Working with Partners

- Talked with Local Crews
- KDOT Signing, Traffic, ITS, and more

## Goals

- Dynamic
- Scalable
- Cost Effective





# Dynamic Curve Warning System

## Solution

- TAPCO blinker chevron system
- Feed back radar
- Rumble strip updates
- Lane changes / elimination
- Flexible delineators
- Overhead sign truss
- CCTV system & ATMS

## Future

- Designed with geometric changes in mind



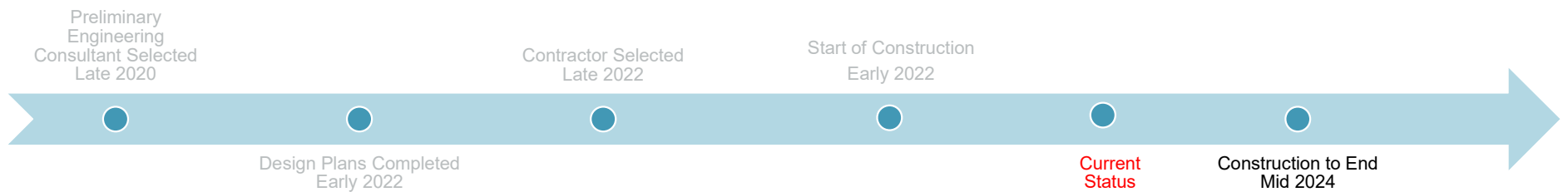
**05**

Current Status



# Current Status

## Moving Forward



# QUESTIONS?

We appreciate the opportunity to speak to you today!



