



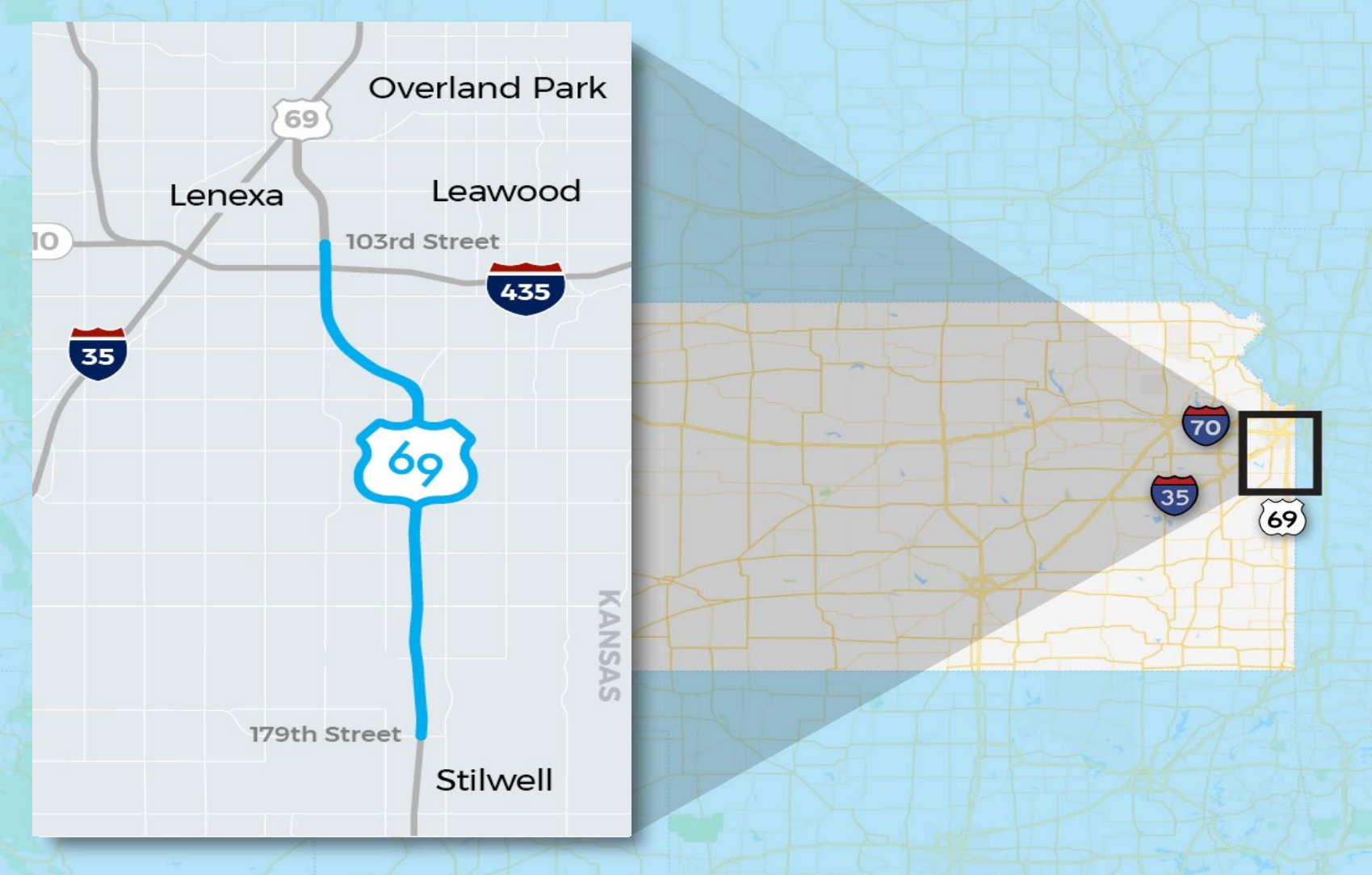
69 EXPRESS

ITS HEARTLAND

April 27, 2022

KDOT Project Number: 69-46 KA-5700-02

PROJECT OVERVIEW



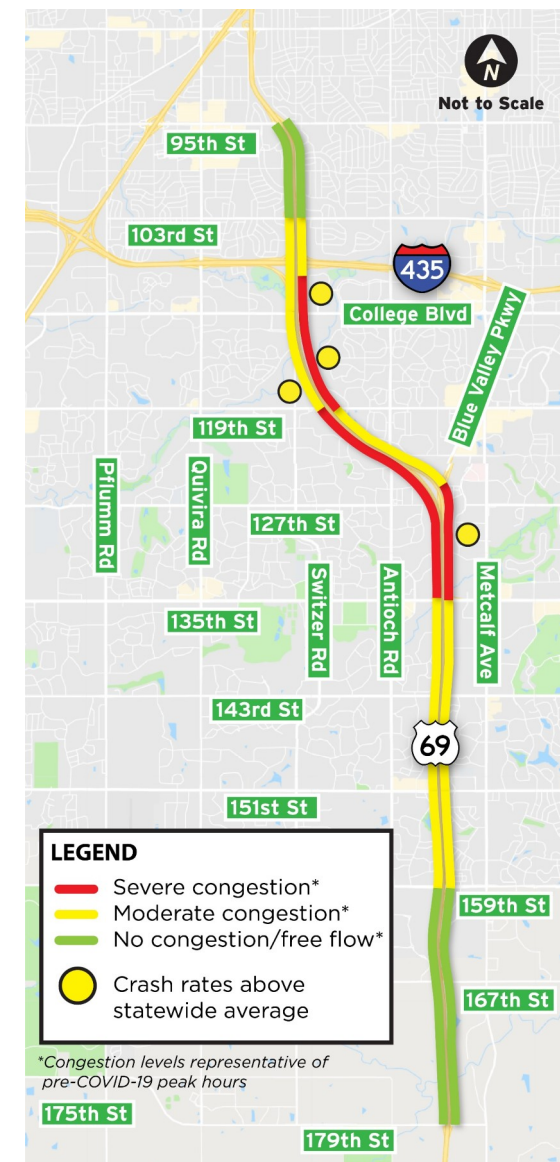
KDOT Project Number: 69-46 KA-5700-02



PROJECT OVERVIEW

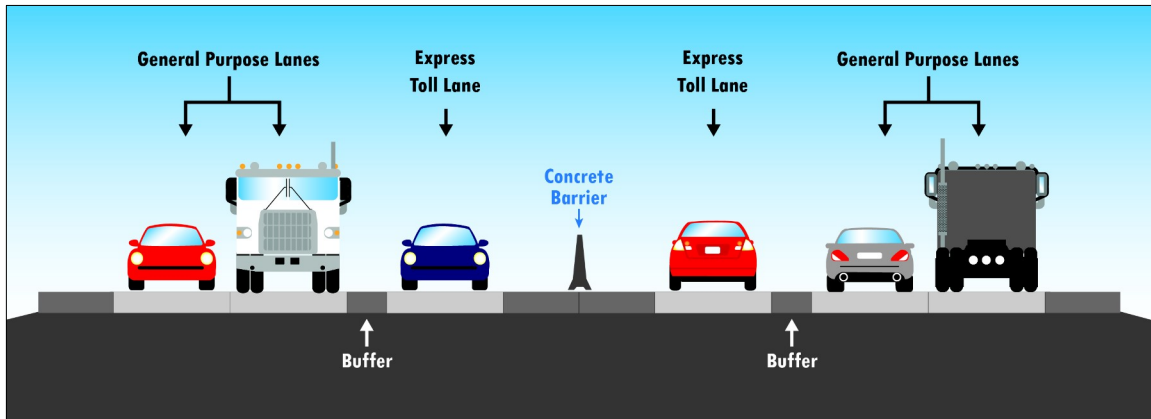
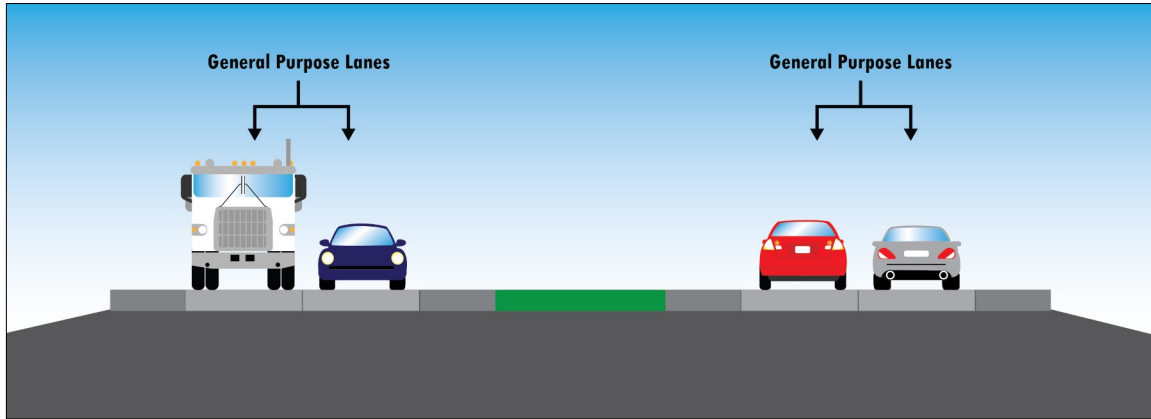
What are the problems?

- Carries more than 80,000 vehicles per day
- Extensive congestion north of 159th Street
- Travel times are unpredictable
- Crash rates above the statewide average
- Pavement and bridges are 50 years old
- Traffic expected to grow
- Peak travel times expected to triple by 2050



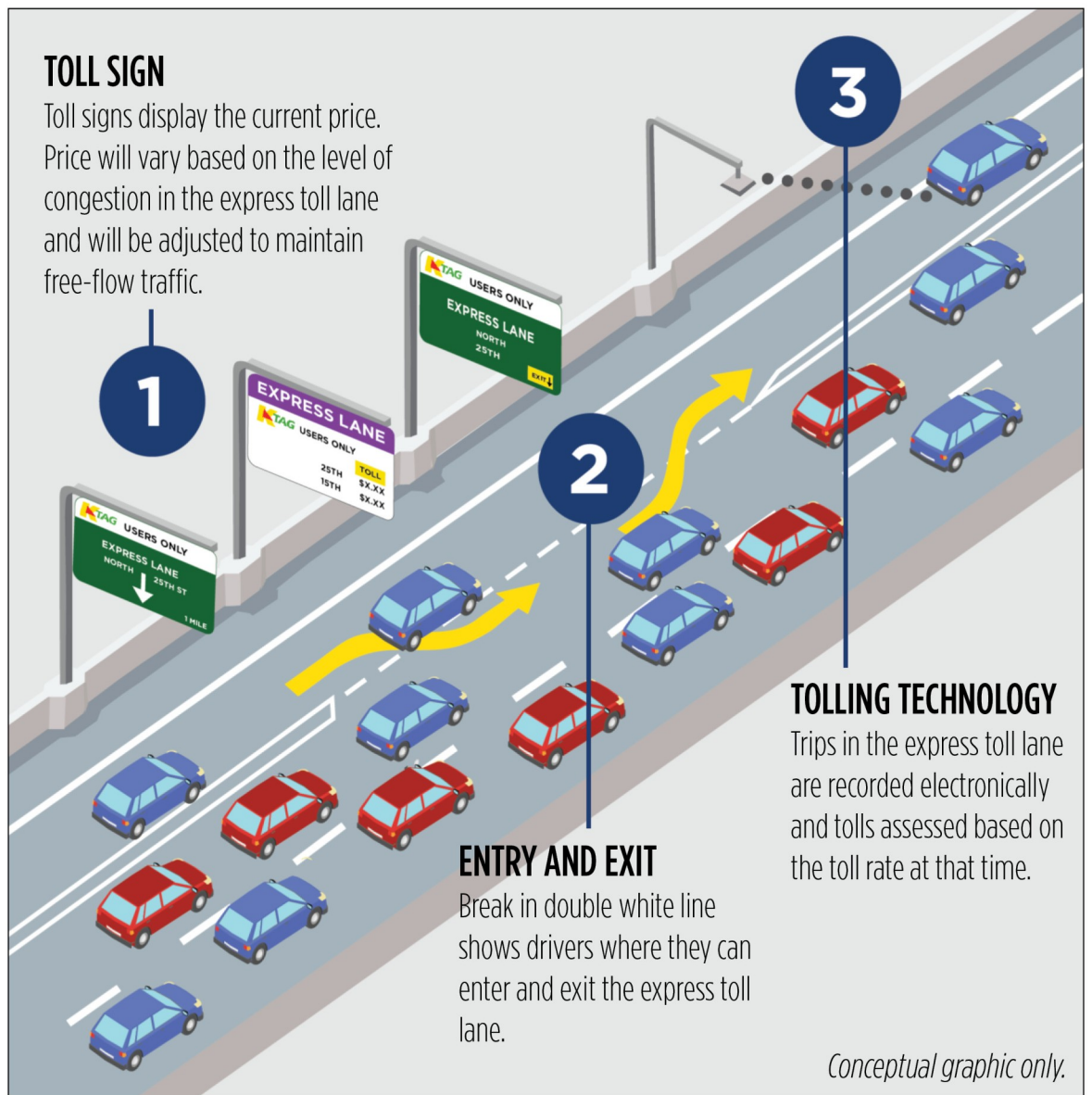
2019 U.S. 69 Concept Study

EXPRESS TOLL LANES



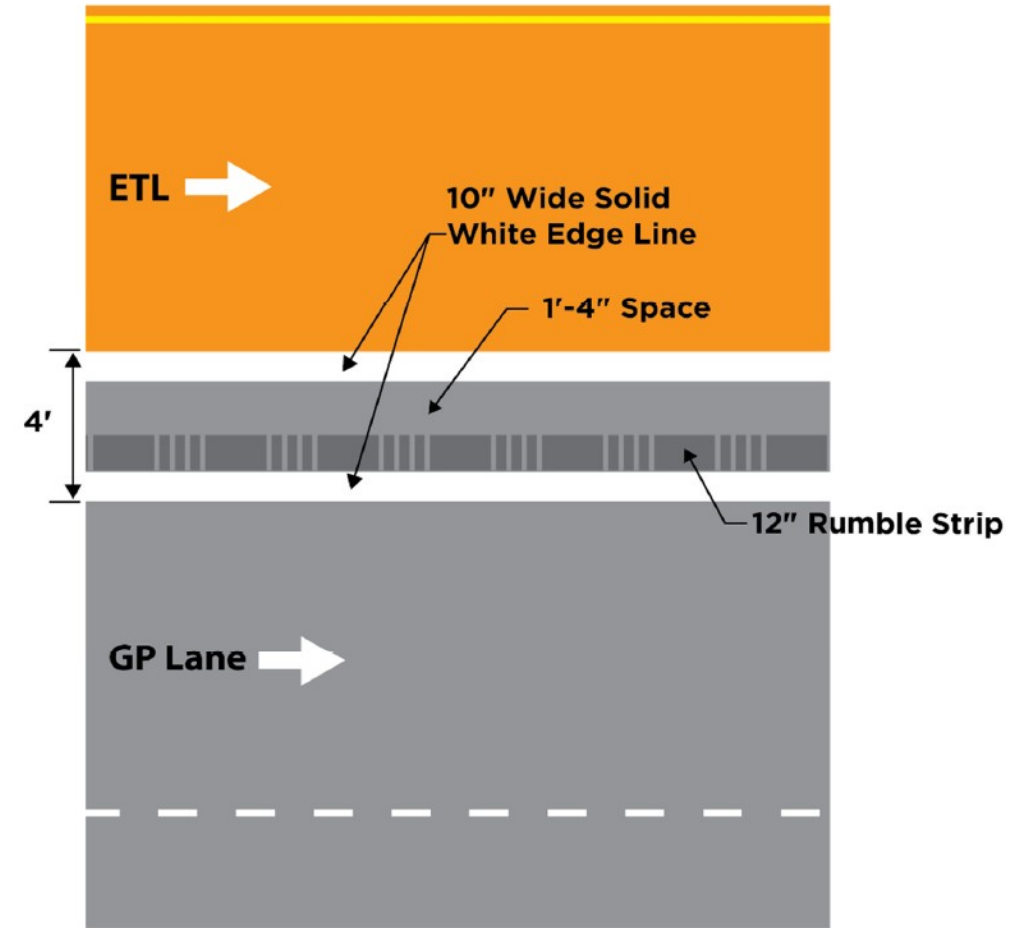
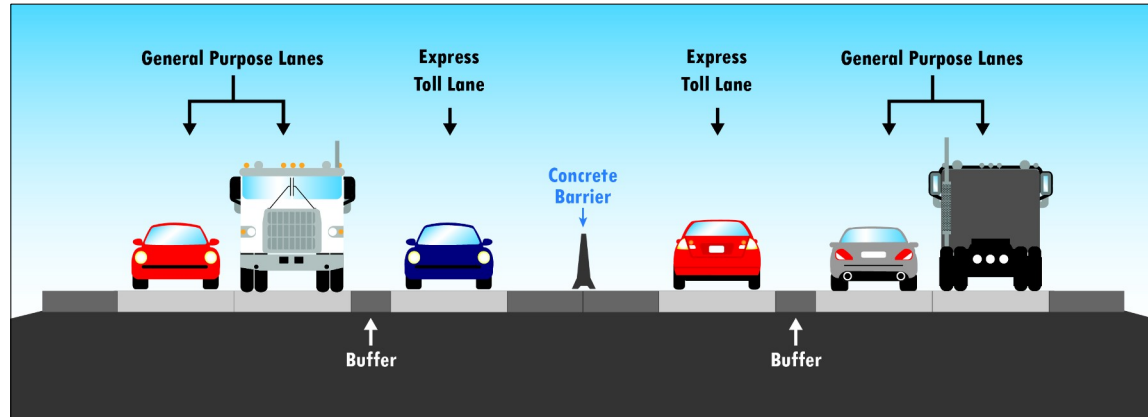
TOLL SIGN

Toll signs display the current price. Price will vary based on the level of congestion in the express toll lane and will be adjusted to maintain free-flow traffic.



Conceptual graphic only.

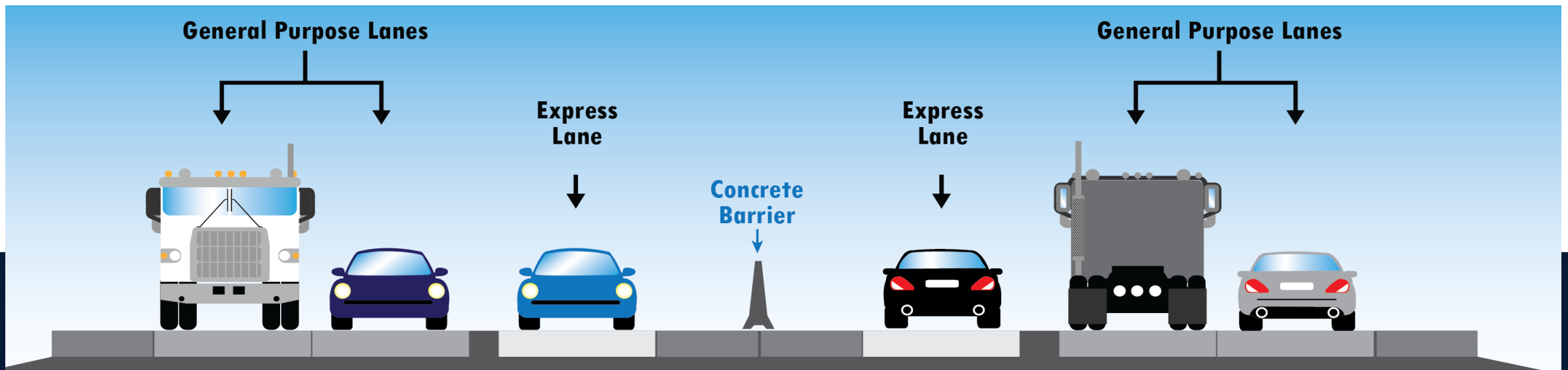
BUFFER SEPARATION



At ingress and egress locations, the buffer pavement markings will consist of single white skip lines to indicate potential weaving.

RECOMMENDED PREFERRED ALTERNATIVE ADD CAPACITY – EXPRESS TOLL LANES

- Best meets the Purpose and Need of the Project
- Best addresses congestion and traffic safety concerns
- Results in fewer impacts to the natural and human environment
- Provides a lower-cost solution
- Promotes sustainability
- Provides flexible choices
- Accommodates local and regional growth



EXPRESS TOLL LANES APPROVED

JUNE 2021

OVERLAND PARK K A N S A S

- ✓ Community Decision
- ✓ Passage of City Resolution No. 4716
- ✓ Preparation of Joint Proposal



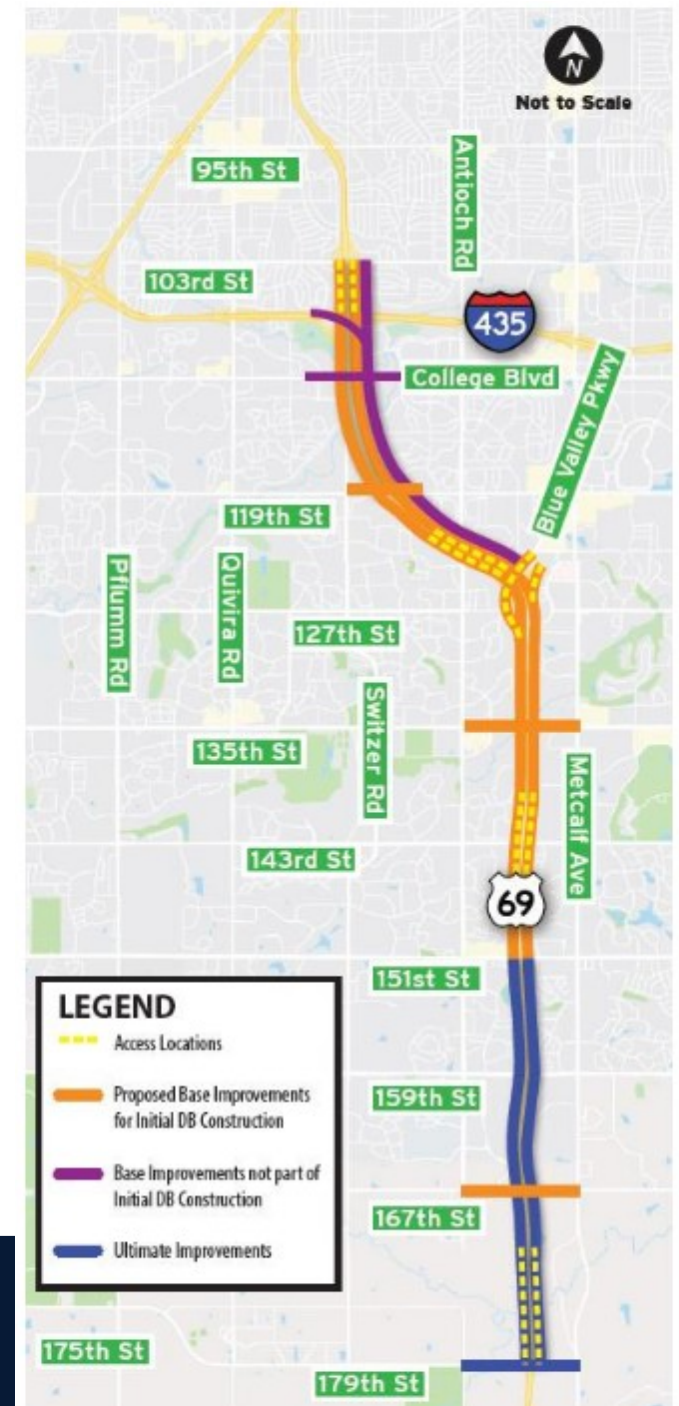
- ✓ 5-0 vote to approve KDOT-OP Joint Proposal
- ✓ Passage of KTA Resolution



- ✓ Approval of Joint Proposal via Resolution No. 21-729

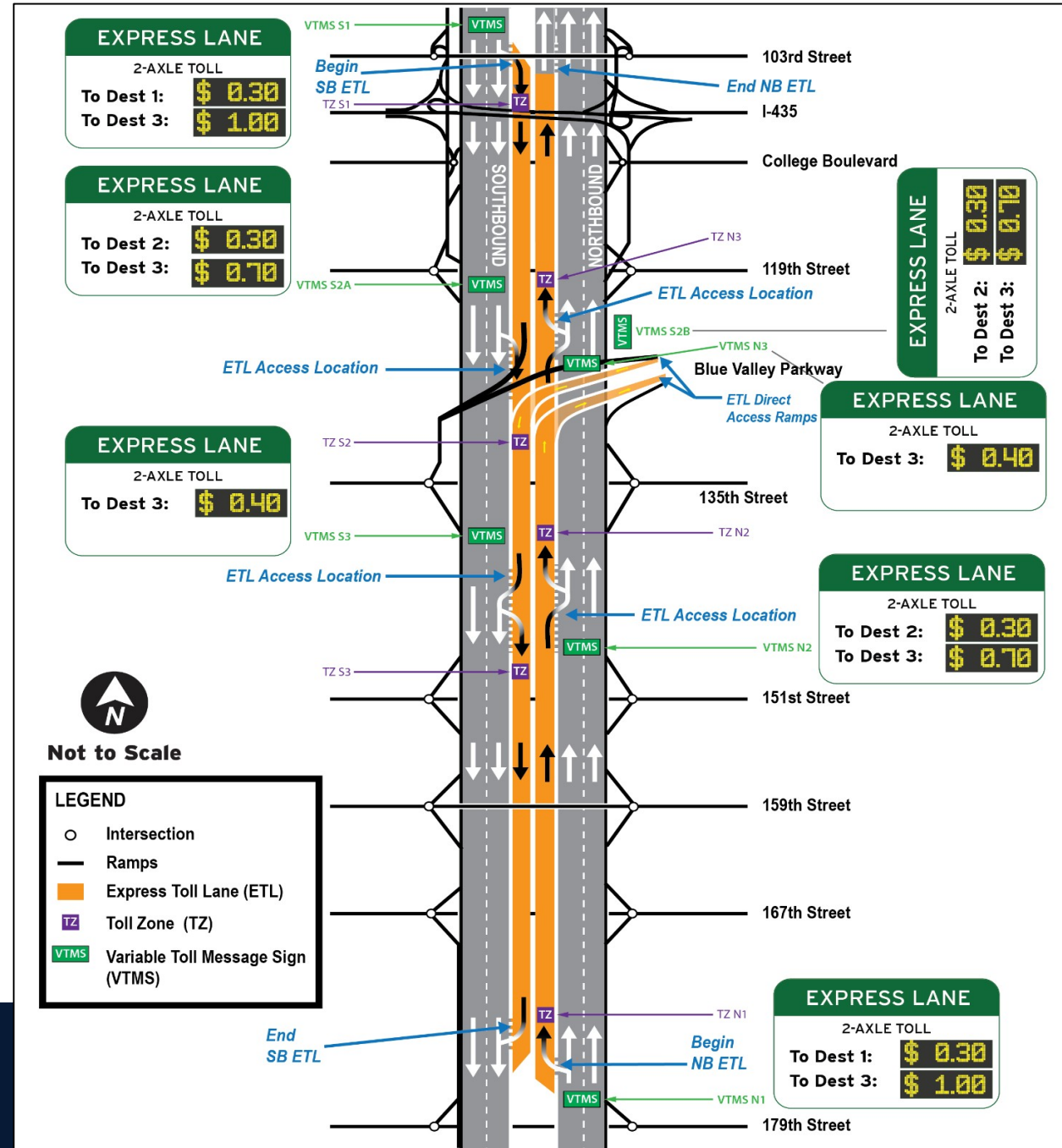
RECOMMENDED IMPROVEMENTS

- **Phase 1** - Orange Project, Base Improvements for the initial DB Construction which include ETL's from north of 151st Street to 103rd Street
- **Phase 2** - Purple Project, Base Improvements possible in the DB Construction, but likely built in the 2030 decade
- **Phase 3** - Blue Project, Ultimate Improvements likely built in the 2040 decade



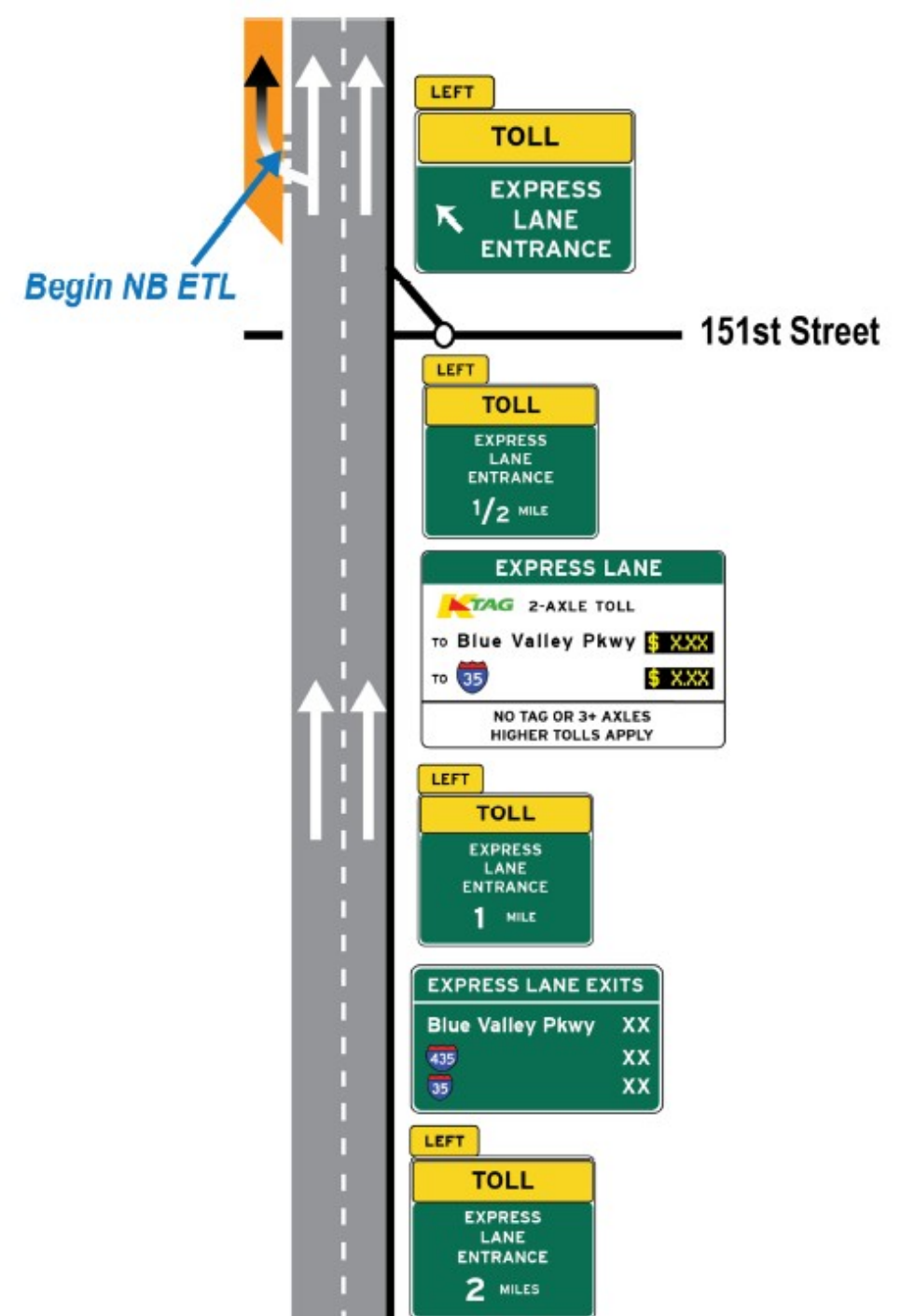
ULTIMATE CORRIDOR OVERVIEW

- Two access points in each direction initially and ultimately three
- Two Toll Zones in each direction initially and ultimately three
- Two mainline Variable Toll Message Signs in each direction initially and ultimately three
- One Variable Toll Message Sign for Blue Valley Parkway on-ramp



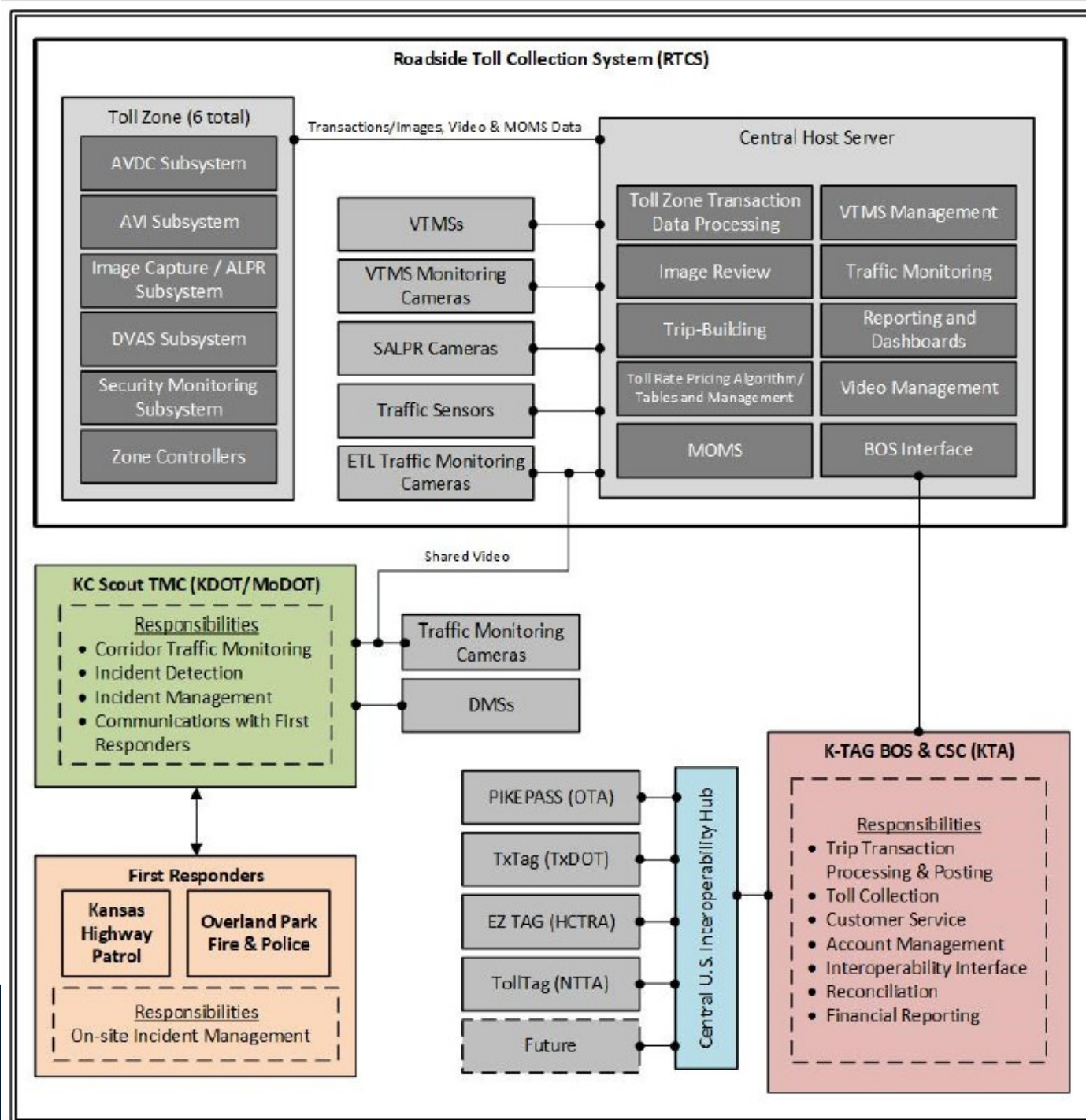
TYPICAL SIGNING PLAN

- Over head and ground-mounted/roadside signs
- Guide motorists, display toll information, and indicate regulatory information
- Combination of static and dynamic signs
- Compliant with the Manual on Uniform Traffic Control Devices (MUTCD)



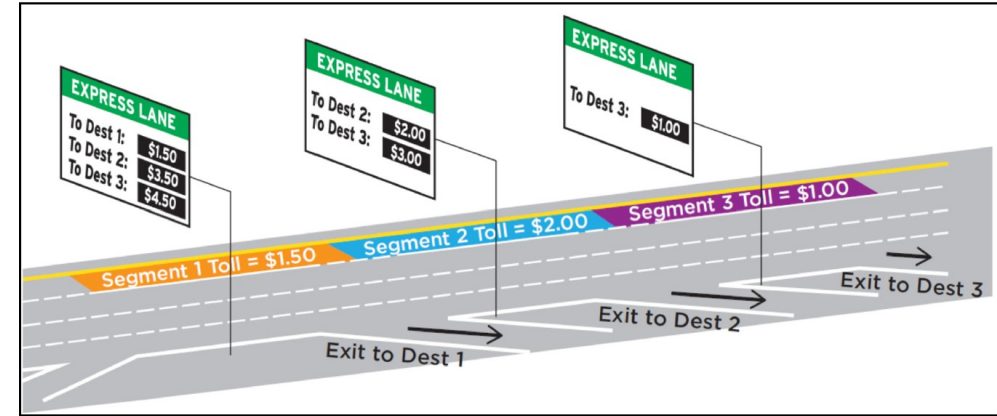
EXPRESS TOLL LANE OPERATIONS

- KDOT will be the project owner and lead agency
- KTA will provide provisions for the tolling back office and customer service
- KC Scout will provide traffic and incident management monitoring
- The Kansas Highway Patrol along with City of Overland Park Police and Fire Departments have jurisdiction as first responders
- Toll system vendor




TOLLING STRATEGIES

- Variable pricing toll rate structure to manage the operations to maintain a minimum desired LOS
- Different rate by segment
- No vehicle class restrictions on use
- Not a “Transponder only” facility and will not require users to be pre-registered
 - Valid and accepted Transponder associated with a valid pre-registered toll account
 - Captured legible image of the vehicle’s license plate



EXPRESS LANE

KTAG 2-AXLE TOLL

TO 135th St	\$ 0.50
TO 	\$ 1.00

**NO TAG OR 3+ AXLES
HIGHER TOLLS APPLY**

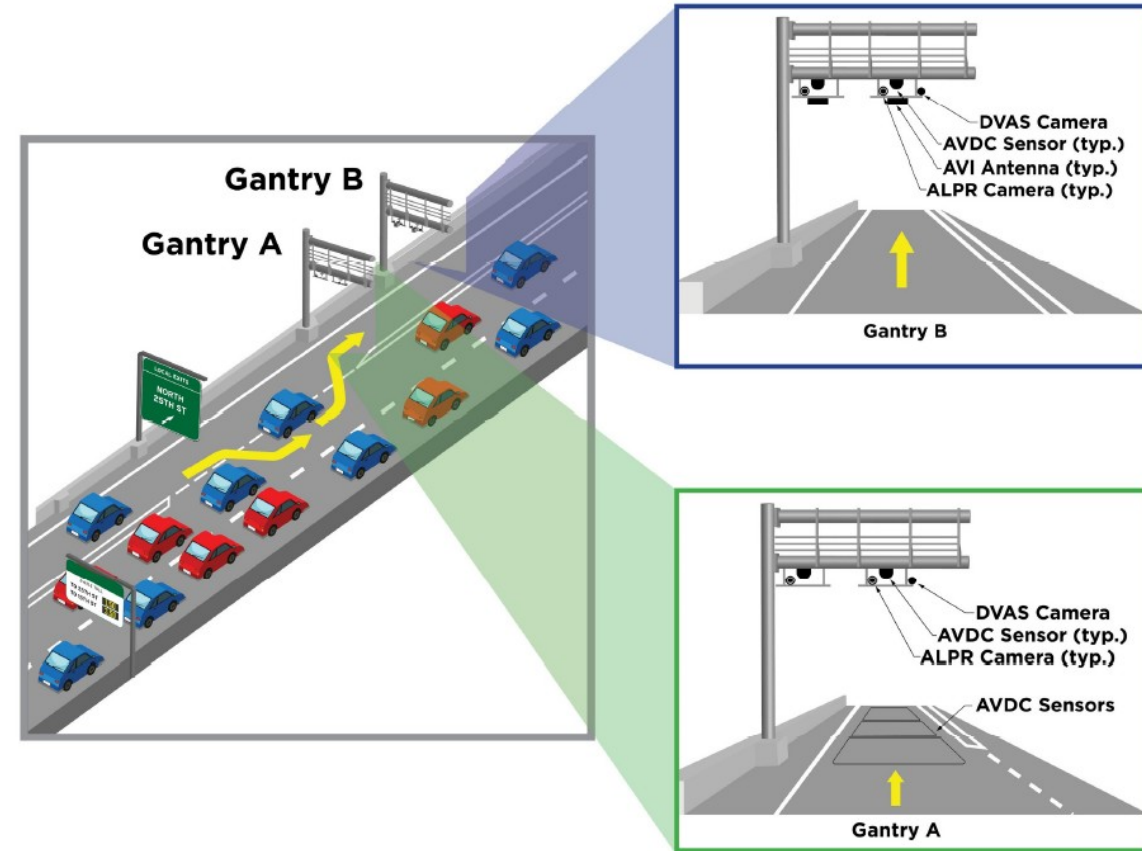
ROADSIDE TOLL COLLECTION SYSTEM

- Identifies the customer (by Transponder or License plate)
- Identifies what they're driving (e.g. number of axles) via in-pavement and overhead devices
- Assigns the proper toll rate accordingly
- Transmits data to Back Office System



ROADSIDE TOLL COLLECTION SYSTEM

- Automatic Vehicle Detection and Classification (AVDC)
- Automatic Vehicle Identification (AVI)
- Image Capture and Automatic License Plate Recognition (ALPR) Cameras
- Digital Video Audit System (DVAS)
- Toll Zone Security Monitoring Cameras
- Traffic Sensors
- Variable Toll Message Signs (VTMS)
- VTMS Monitoring Cameras
- Traffic Monitoring Cameras
- Supplemental Automatic License Plate Recognition (SALPR) Cameras



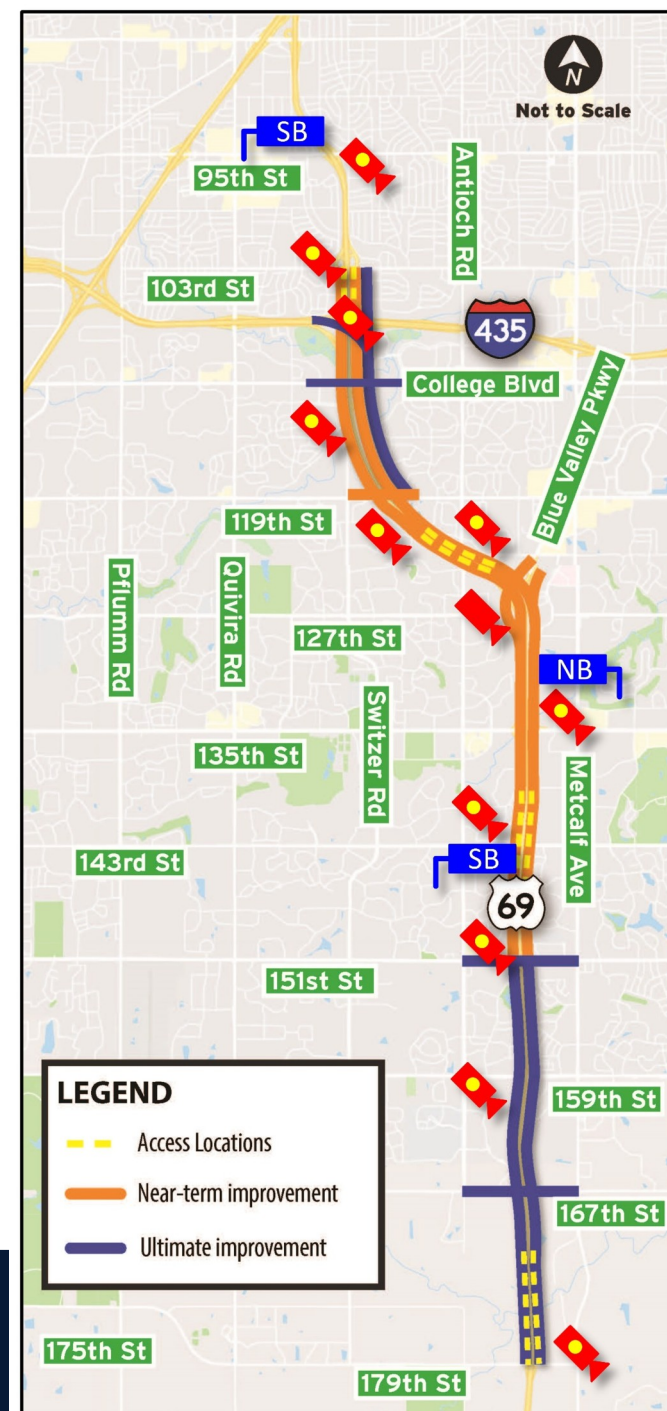
BACK OFFICE SYSTEM

- Financial system designed to collect toll revenue
 - Transaction processing
 - Account management
 - Billing
 - Customer service
 - Interoperability interface



KC SCOUT SYSTEM

- Existing KC Scout devices to remain in place
- Toll system operator responsibilities dictated two systems
- Separate fiber backbones, but in same duct system
- Separate camera and traffic sensors, but sharing of video and data
- Coordination on traffic incident management



TRAFFIC INCIDENT MANAGEMENT

- Traffic incident management very similar to today's operations
- Coordination among KC Scout, first responders and system operators
- Predetermined rules for waving tolls



Source: Central Texas Regional Mobility Authority

EXPRESS LANE

KTAG 2-AXLE TOLL

TO 135th St **FREE**


TO  **FREE**

NO TAG OR 3+ AXLES
HIGHER TOLLS APPLY

EXPRESS LANE

KTAG 2-AXLE TOLL

TO 135th St **CLOSED**

TO  **CLOSED**

NO TAG OR 3+ AXLES
HIGHER TOLLS APPLY



69 EXPRESS

QUESTIONS ?

KDOT Project Number: 69-46 KA-5700-02