



KDOT Innovations Program Update

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Agenda

- Innovations in KDOT Right-of-Way
 - Transportation Solutions
 - Broadband Expansion
- Innovative Technology Program Overview

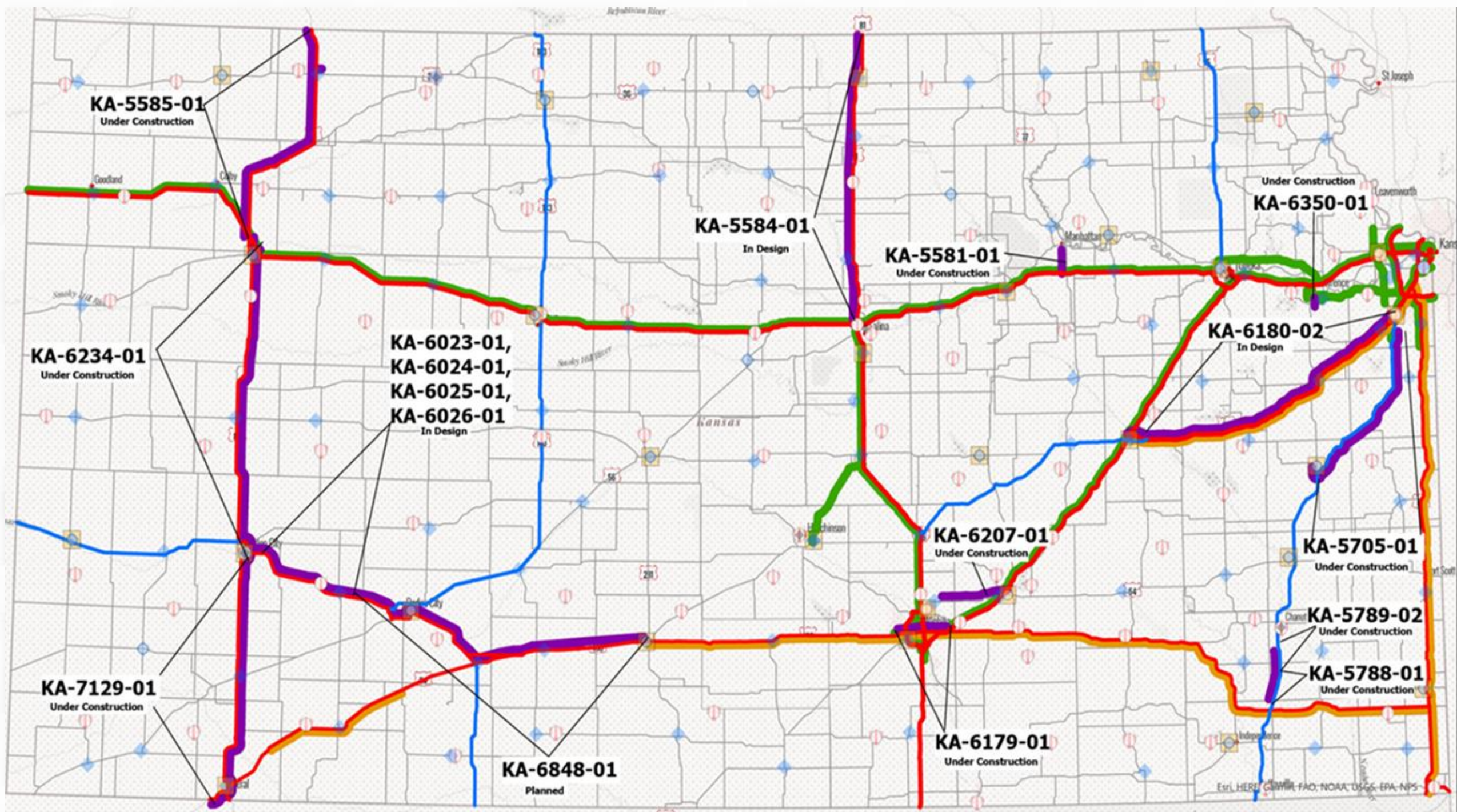


Innovative Connected Technologies

State Fund Set-Aside

- Focus on Installation of Conduit and Fiber within KDOT Right-of-Way
 - Funded at \$10 Million per Fiscal Year
 - Intelligent Transportation Systems
 - Future Innovative Transportation Solutions
 - Provide Infrastructure for Broadband Expansion
 - Leveraged IKE Funds to Receive Federal Funds
 - Broadband Policy





Innovative Connected Technologies

State Fund Set-Aside

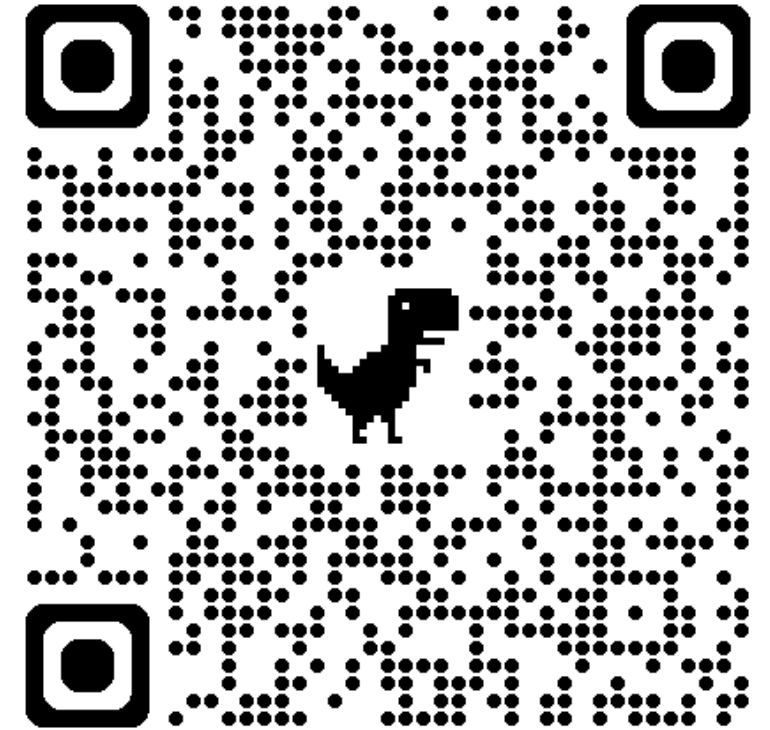
- Partnered with Kansas Department of Commerce and Other Partners to Apply/Receive a Middle Mile Grant
- Leveraged State Funds to Receive Federal Funds - \$26M Match \$43M Federal Funding
- Approximately 533 Route Miles of Conduit and Fiber and 105 Miles of Blown Fiber in Existing KDOT Conduit



Kansas Broadband Acceleration Grants (BAG)

Broadband Infrastructure Construction Grant Fund

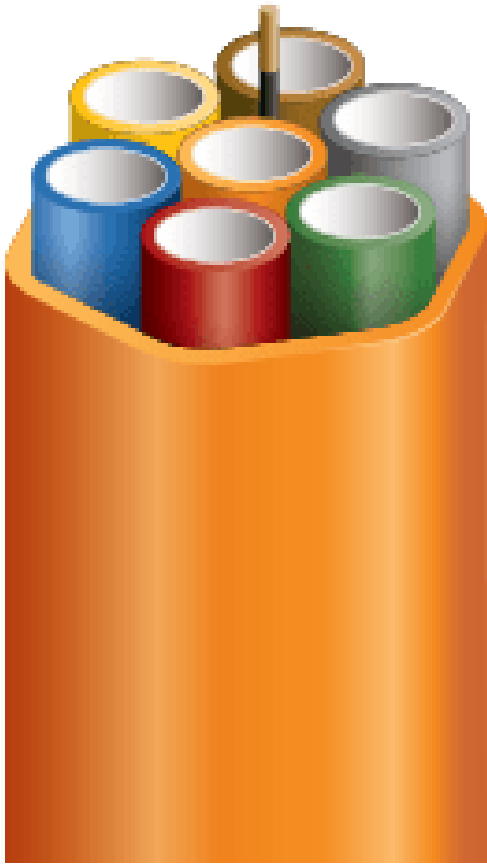
- \$85M over 10 years Provided Through IKE Broadband Modernization Funding
- Administered by Commerce OBD
- Grants Funds up to 50/50 Cost Share
- Provide High-Quality, Reliable Broadband Infrastructure to Unserved, Economically Distressed Communities and Areas of Compelling Need
- Last Mile



Dig Once Strategy

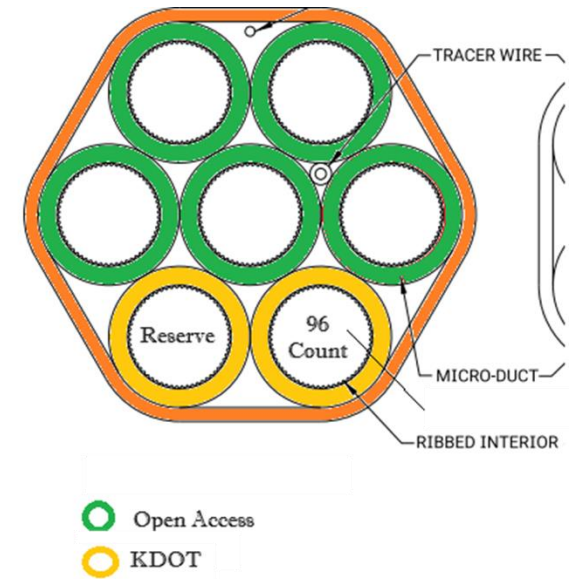
- Add Conduit/Fiber to an existing KDOT project:
 - Preservation +
 - Efficiency in the design process
 - Efficiency in the construction process
- Public Private Partnership
 - Shared Cost of Design and Construction
 - Shared Trench
 - Shared Conduit





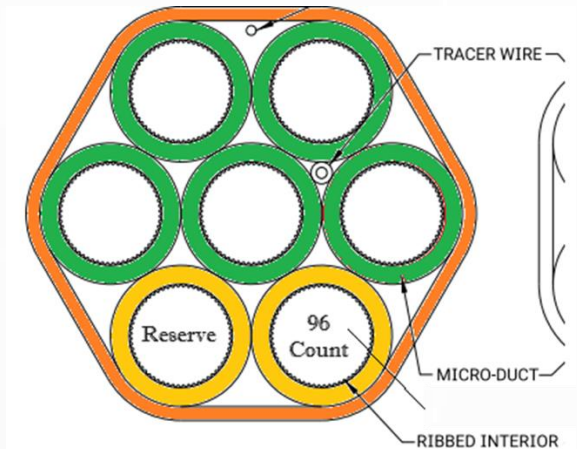
Broadband Policy

- Expand Broadband in Rural Areas
- Partner with Internet Service Providers
- Revenue for Operation and Maintenance
- Expansion of the Network
- Fair and Equitable Leasing
- Clean up Right-of-Way



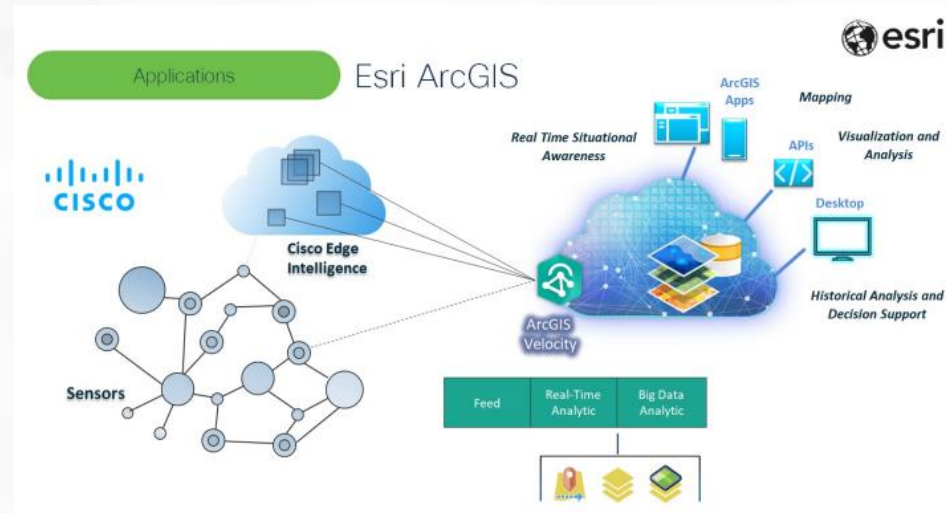
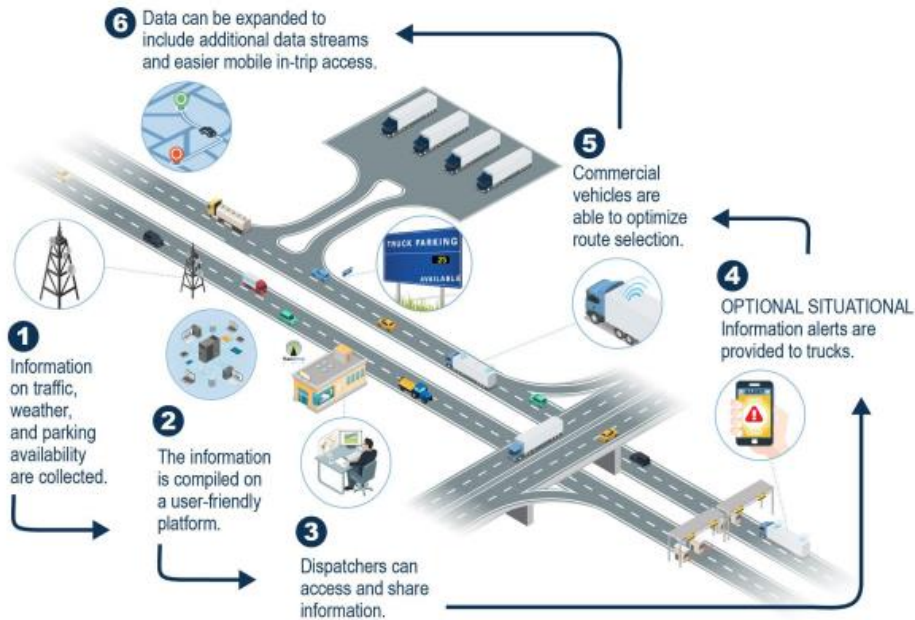
Technology Network

- Real-time alerts
- Long-term decision support



Open Access
KDOT

FIGURE 1 - Project Concept



Outcomes

- Setting Kansas up for the future of transportation
 - Intelligent Transportation Systems
 - Connected Vehicle Solutions
 - Safety Improvements
- Expanding broadband throughout Kansas
 - Long haul capabilities with the 7-way conduit
 - Last mile connectivity through Broadband Acceleration Grants



Kansas Statewide Connected and Autonomous Vehicle Vision Plan

MISSION

Create a connected and autonomous transportation future

VISION

To support an evolving and partnering environment of innovative and practical Connected and Autonomous Vehicle solutions for a safe, reliable, and integrated transportation network

GOALS

Improve freight safety and efficiency

Reduce fatalities

Spur economic development

Strengthen decision making

Pilot CAV deployments

Promote CAV deployment partnerships

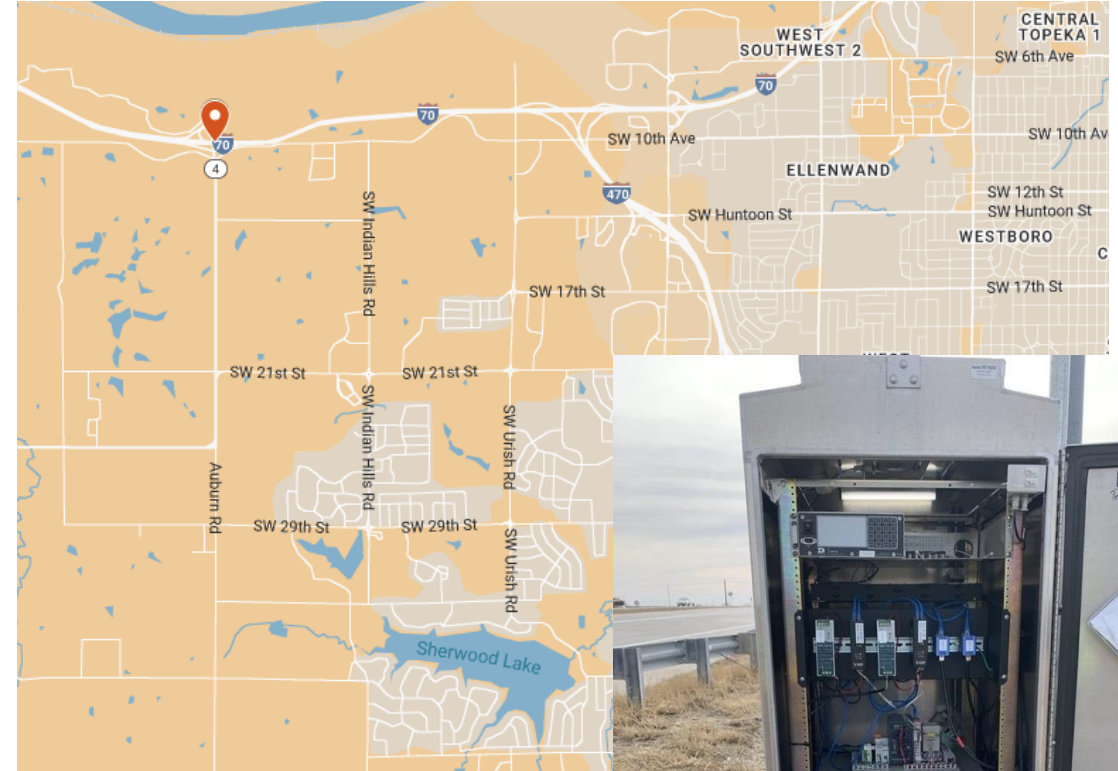
Expand CAV-relevant workforce

Provide equitable CAV access



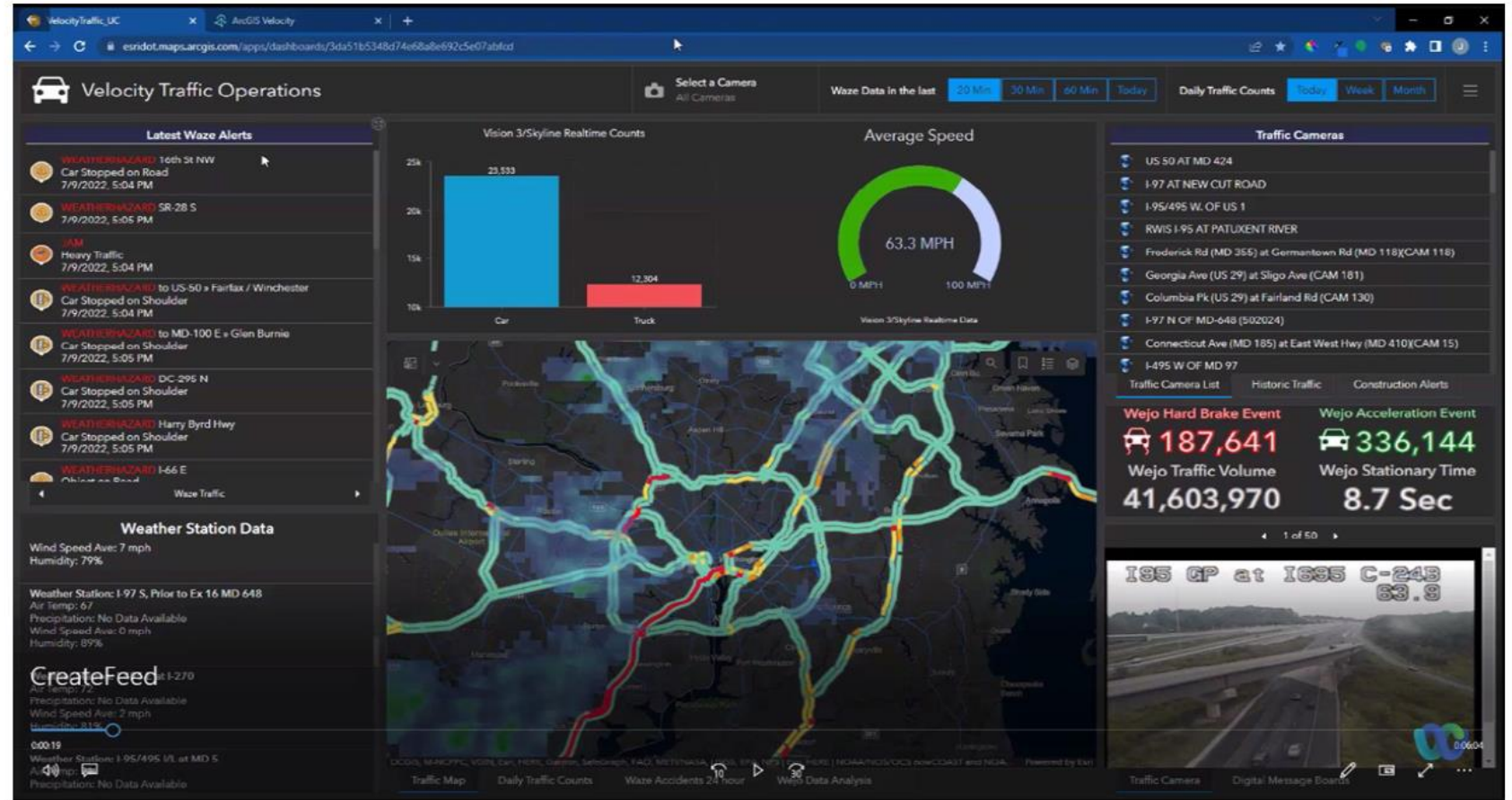
Connected Vehicle Proof of Concept

- Roadside Units
- Connected Vehicle Data Collection
- Data Visualization
- Determining the Data we Need
- Understanding our Infrastructure
- Includes Wind Warning and Truck Tip-Over Use cases



Visualization Samples

Traffic operations
with video
integrations



Great Plains Rural Freight Technology Corridor Project – US-83

- \$14 Million Project
- Federal Award - \$6.7M
- KDOT Installs Fiber
- Federal funds provide technologies

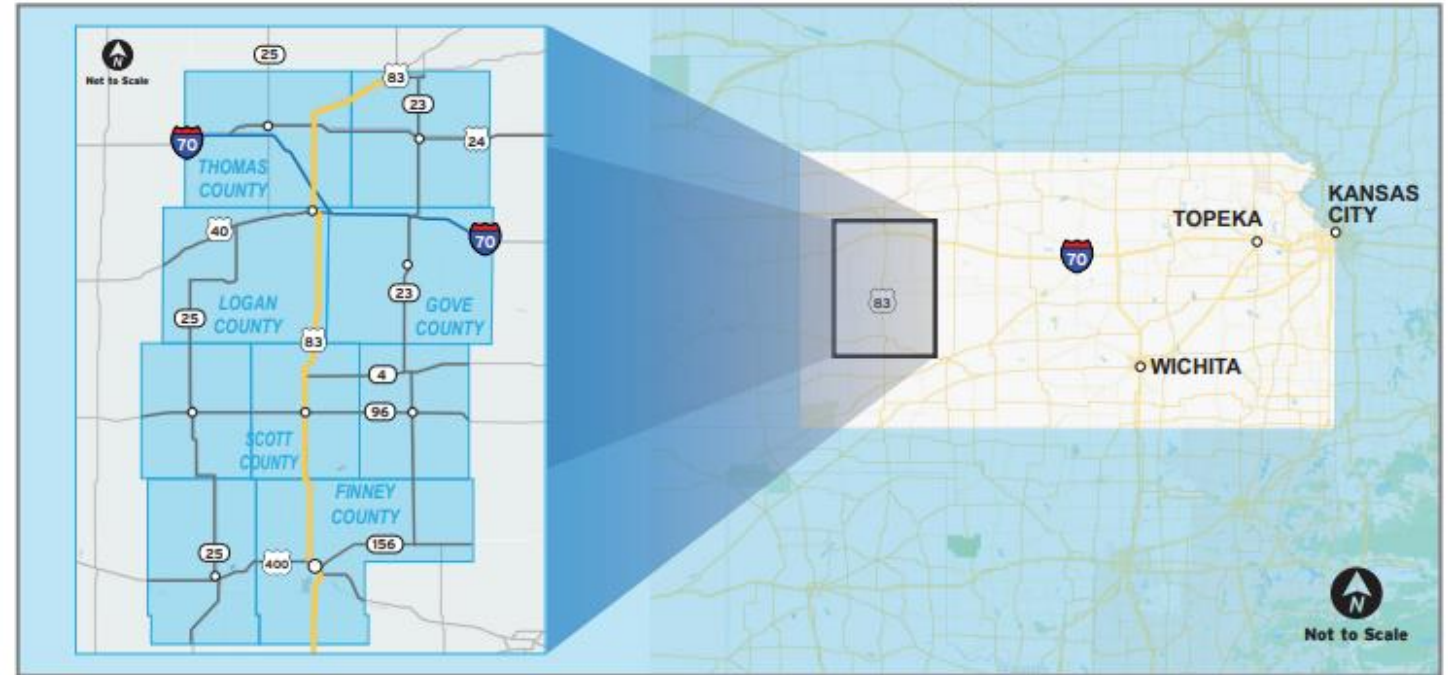
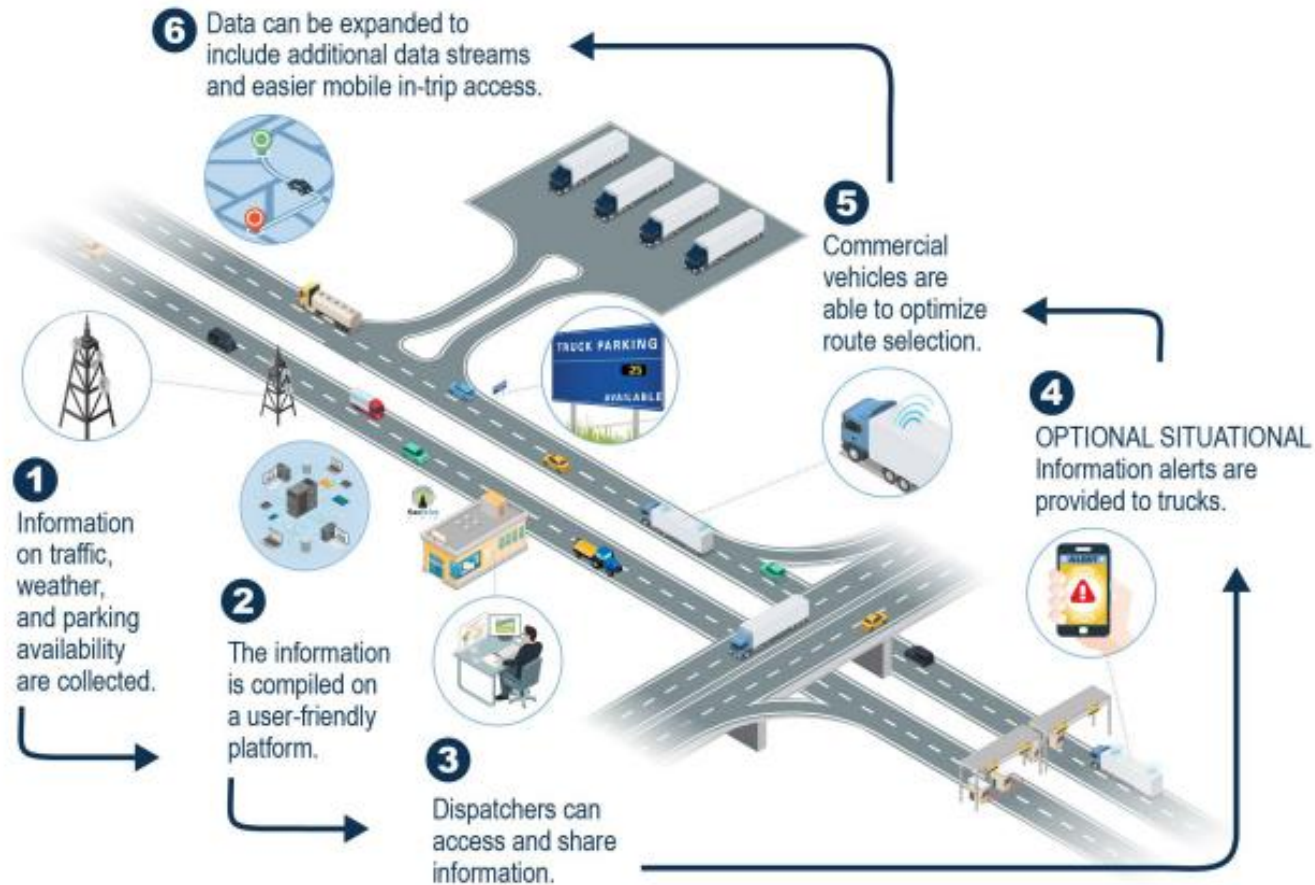


FIGURE 1 - Project Concept



US-83

Traveler Information

Transportation
Management
Technologies

Infrastructure
Maintenance

Advanced Safety
Systems

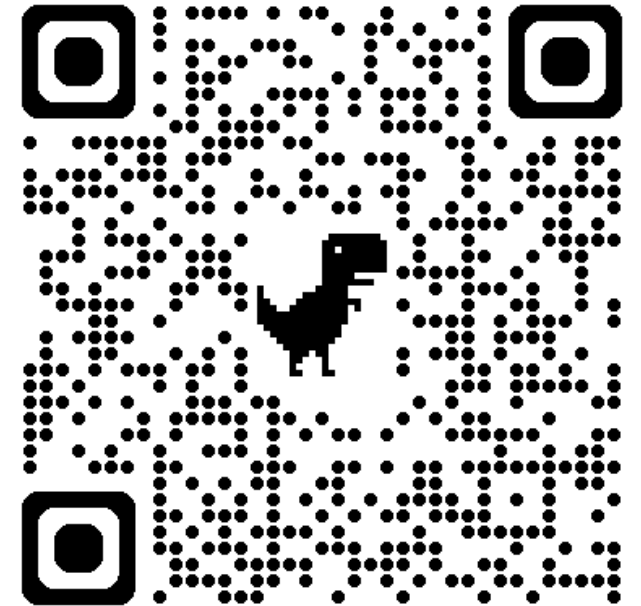
Data Collection



**Exciting new upgrades now
available on the KanDrive app!**

LEARN MORE

- Display oversized truck locations (U.S. 83 Corridor only)
- Alerts on high wind, low visibility and ice/snow road conditions
- Operate on Amazon Alexa home speaker and app
- Integrate with Android Auto and Apple CarPlay
- Enhance detour information
- Improve sharing of information for work zones



Innovative Technology Program Updates

Innovative Technology Program

(Transportation Technology Development State Fund Set-Aside)

- New Program Manager
 - Michael Flory
 - Michael.Flory@ks.gov
 - 785-296-0937



Innovative Technology Program

(Transportation Technology Development State Fund Set-Aside)

- \$20 Million Eisenhower Legacy Transportation Program (IKE)

Initiative

- Leverage Innovative Technology Investment Opportunities to Position State for the Future
- Provide Financial Assistance to Partners for Projects that Promote Safety, Improve Access or Mobility and Implement New Transportation Technology in the Local Community of the Project



Innovative Technology Program

(Transportation Technology Development State Fund Set-Aside)

- Funding / Match Requirements
 - \$2 Million Available Per Fiscal Year
 - Maximum of \$1 Million Per Project
 - Funds are for Reimbursement Only
 - A Minimum of 25% Non-State Cash Match Required
 - Non-Cash Local Matches Will Not Be Considered



Innovative Technology Program

(Transportation Technology Development State Fund Set-Aside)

- Eligible Applicants
 - Projects typically will be administered by a local unit of government
 - Non-governmental applications with a local government partner will also be considered
 - Educational institutions may apply without any partners necessary



Innovative Technology Program

(Transportation Technology Development State Fund Set-Aside)

- Eligible Projects
 - All Transportation System Projects are Eligible Including Roadway (on and off State System), Rail, Aviation, Unmanned Aerial Systems (UAS), Bike/Ped, Transit, Software and Technology Infrastructure
 - Innovative Technology is Defined as Any Technology Not Currently Existing in the Local Community of the Project
 - Candidate projects should include projects not eligible for other KDOT programs
 - Additional Consideration Given to Projects that Improve Safety, Support Economic Growth, Retention or Recruitment of Business, Add Value to a KDOT Project



Innovative Technology Program

(Transportation Technology Development State Fund Set-Aside)

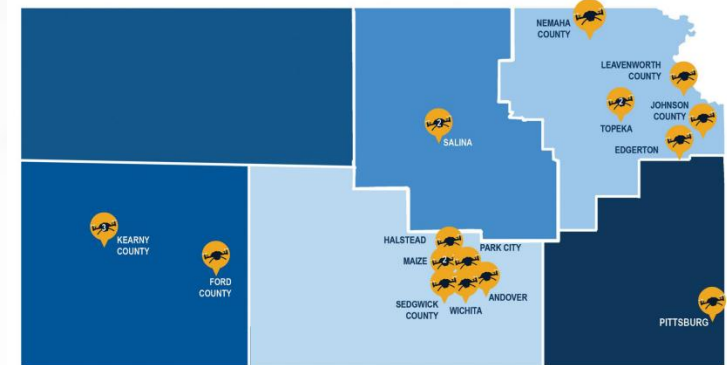
- How to Apply
 - Following the Summit, Submit a Project Concept Form
 - Once KDOT has Reviewed Concepts, an Application will Sent
 - All KDOT Innovative Technology Program Applications/Attachments Must be Submitted as a Single PDF Document via email to InnovTechProgram@ks.gov
 - Applications will be Reviewed by KDOT Innovative Technology Committee



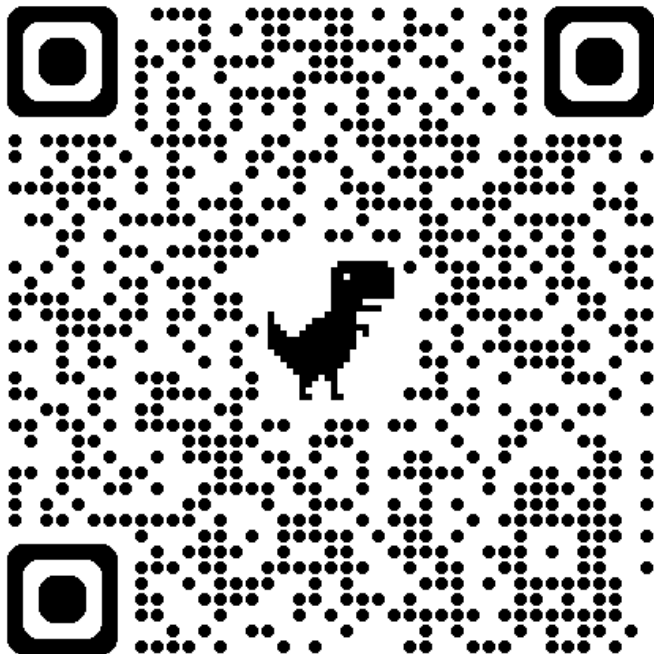
Innovative Technology Program

(Transportation Technology Development State Fund Set-Aside)

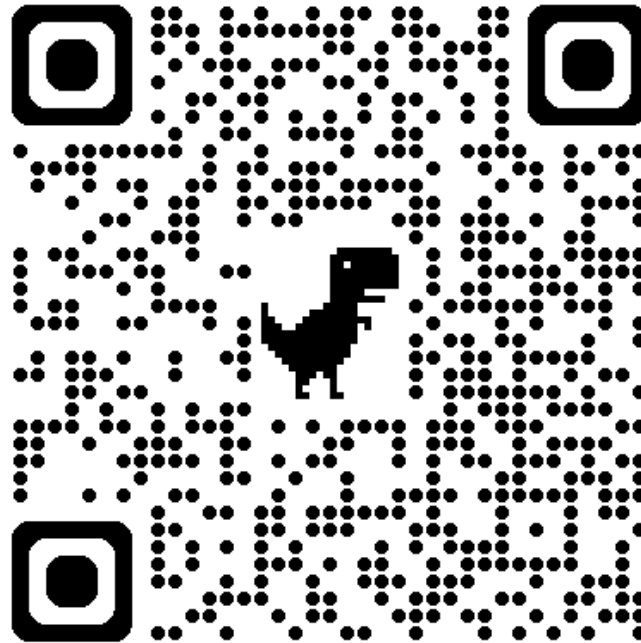
- Fall 2024/Spring 2025 Awardees
 - 20 Awardees; \$4.5M State funds; \$5.97M Total Project Cost
 - Highlight of Selected Projects
 - Autonomous Agriculture Vehicle Pilot
 - Blocked Rail Crossing Alert System Pilot
 - Improving Multi-modal Safety Using Advanced AI
 - Pavement Management/Assessment App Using AI (5 projects)
 - Advanced Aviation and Engineering Research Operations (UAS/AAM)
 - VIN Inspection Program Modernization



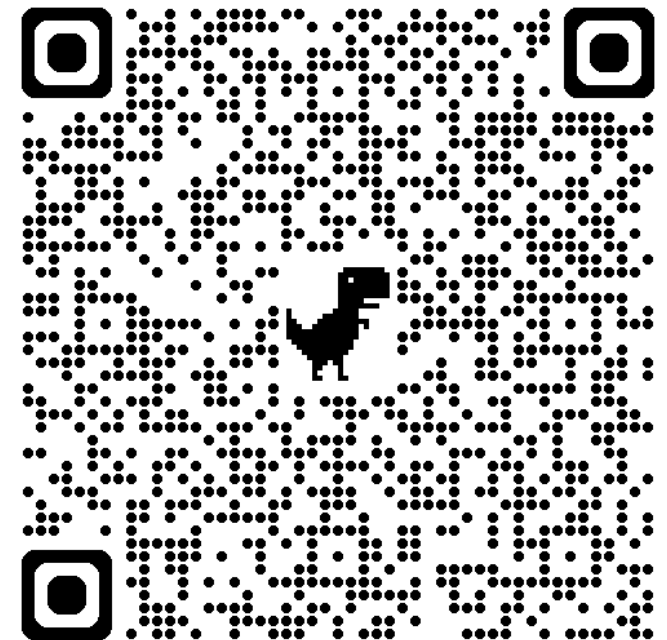
Innovative
Technology
Program Web
Page



Fact Sheet



Concept
Submittal Form





- Advanced Flight Operations
- Advanced Agronomy Program
- Ground-based Projects
- Farmer Trials w/ Early Adopters
- Fire Operations



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Innovative Technology Summit

Join us next year!

Questions?

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