I-64 C/AV Feasibility Study

Pre-RFP Webinar

5-577 – I 64 Connected/Automated Vehicle Planning Study

Presentation by Steve DeWitte

Virtual Teams Meeting | October 31, 2022

TEAM KENTUCKY®
TRANSPORTATION CABINET

Vision

Striving to be national leaders in transportation who provide transportation infrastructure and services for the 21st century that delivers new economic opportunities for all Kentuckians.

Mission

To provide a safe, efficient, environmentally sound and fiscally responsible transportation system that delivers economic opportunity and enhances the quality of life in Kentucky.

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DOH Operational Goals

GOAL 1
Promote Safety in All Decision Making

GOAL 2
Strengthen Stakeholder and Customer Relationships

GOAL 3
Deliver Economic Opportunities and Enhance Quality of Life

GOAL 4
Optimize Performance through People and Innovation

GOAL 5
Nurture a Culture of Diversity and Inclusion

Motivation for Change (WHY)

Current Condition

- Human Driver required
- Crashes
- Secondary Crashes
- Bottlenecks
- Non-Recurring Congestion
- Recurring Congestion

What's Possible

- Expand use of Transportation System to Driverless population (e.g., Older Adults, People with Disabilities, and others who are unable or unwilling to drive)
- Speed Harmony/Improved Fuel Economy
- Safer Roadways
- Improved Travel Time Reliability
- Expand use of Transportation System to New Entrants (e.g., AV TNC, AV Freight Mobility as a Service)

Alignment with KYTC CAV Strategy

- Engage Stakeholders through Outreach and Collaboration
- Partner to Achieve Regulatory Consistency
- CAV Demonstration
- Educate the Public
- Assist Legislators and Policymakers
- Pinpoint Future Connected Corridors
- Communicate Work Zone Data

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Six Year Highway Plan

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SIX YEAR HIGHWAY PLAN
FY - 2022 THRU FY - 2028

Fayette	**I -64**	From MP 71.000 To 89.480
Franklin	**I -64**	From MP 46.303 To 59.431
Scott	**I -64**	From MP 67.106 To 71.000
Woodford	**I -64**	From MP 59.431 To 67.106

On NHS **Description:** PLANNING STUDY TO EVALUATE THE POTENTIAL FOR DEDICATED AUTOMATED OR CONNECTED VEHICLE (C/AV) LANES ON I-64 BETWEEN LEXINGTON AND LOUISVILLE.

Type of Work: SCOPING STUDY(O)

Item#: 5-577.00 **Parent#:** 5-577.00 **Length** 43.177
Plan Year: 2022 **Parent Year:** 2022

FUND	PH	2022	2023	2024	2025	2026	2027	2028	Phase Total
NH	P	$0	$0	$750,000	$0	$0	$0	$0	**$750,000**
		$0	**$0**	**$750,000**	**$0**	**$0**	**$0**	**$0**	**$750,000**

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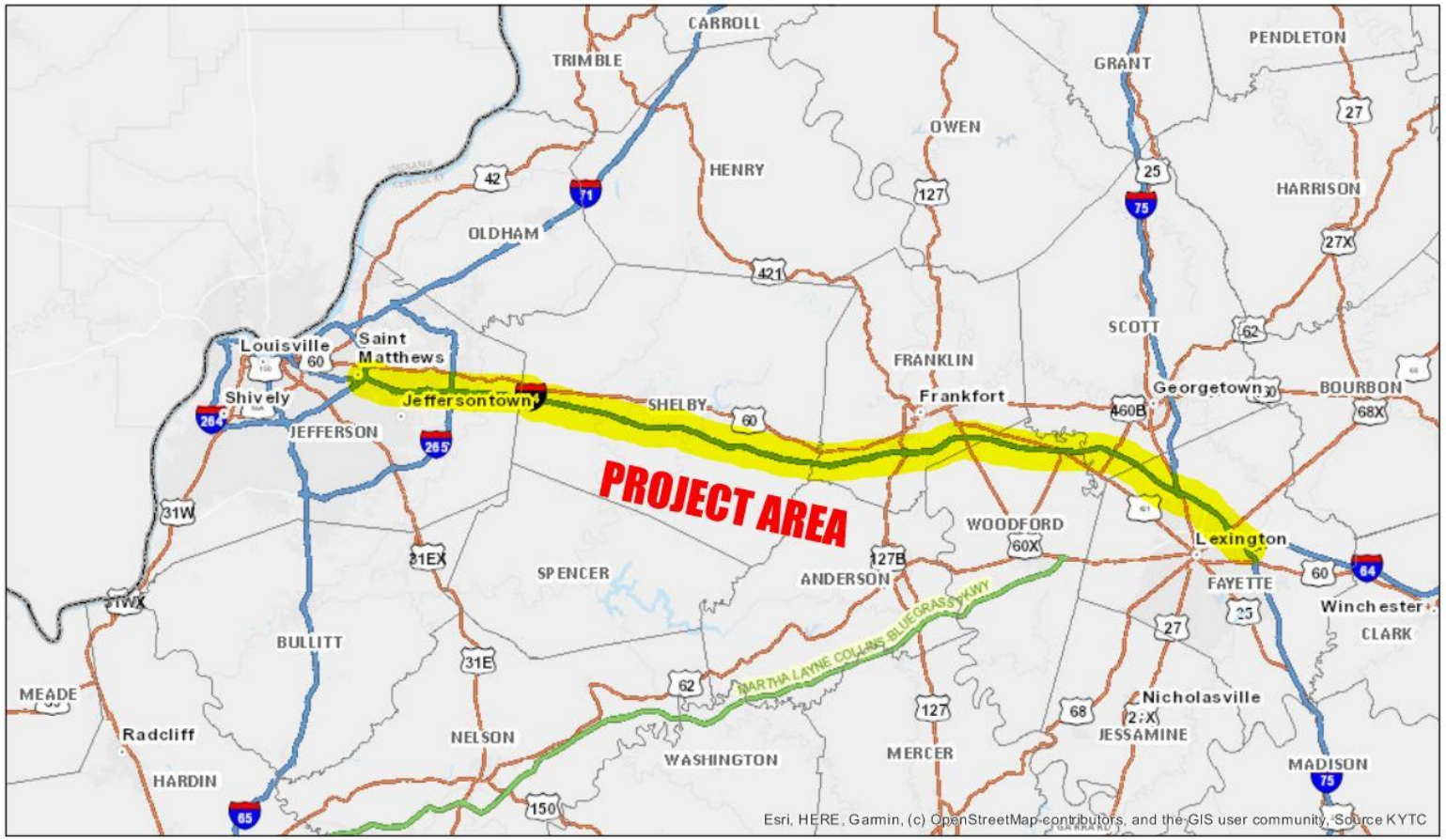
5-577 Study I-64



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I - 64
Various Counties
Item No. 5-577.00
Planning Study

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Author: Professional Services
Date: 10/24/2022

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I -64 Existing Conditions

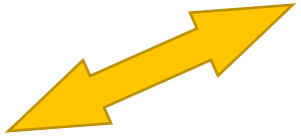
I -64 Existing Conditions

I-64 C/AV Feasibility Study

RFP Components

CORE Components of Study

- Suitability for dedicated C/AV lanes, “flexible” managed lanes, mixed traffic
  - System Needs –Digital and Operational (hardware/software)
  - Roadway Needs (widening/striping/signage)
  - Utility Needs (communications/energy source /broadband, other)
- Maintenance Considerations



- Implementation/Preparation for connected vehicle technology
  - Hardware, Conduit, Edge Computing, Power
- Identification of legal and regulatory hurdles, enabling legislation

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CORE Components of Study

- Traffic Impact/Management
- Public and private stakeholder engagement
- Identification of NEPA Requirements
- Cost estimates
- Funding opportunities

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Community Outreach/Stakeholder Engagement

- Engaging with community members (listening carefully to their transportation needs)
- Clearly communicating AV/CV opportunities through engaging means (e.g., fact sheets, examples, and or demonstrations, etc)
- Public, Quasi-Public, and Private Partner Identification

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Prequalifications

Required

- Intelligent Transportation Systems
  - ALL 4
- Highway Design
  - Rural, Urban, Advanced Traffic
- Traffic Ops
  - Traffic Engineering
- Planning
  - CTP, TPE, ATPE, Forecasting, Modeling

Not Initially Required

- *Traffic Ops*
  - *Roadway Lighting*
- *Environmental*
  - *AQ, Socio-Ec, Noise, Document Writing, Cultural Historic*
- *Structural Design*
  - *Spans <500'*
- *Geotech*
  - *Geotech Engineering*

Interview

- Short-list week of December 19th
- Interviews week of January 16th to avoid conflicts with TRB and KBT
- Interviews held **virtually** via MS Teams

- Introduce SMEs who might not be known to KYTC

*All dates subject to change

Other Evaluation Factors

- **Knowledge** and **understanding** of the physical, digital and operational infrastructure attributes necessary to deliver a connected automated corridor that supports increased equity, quality of life and logistics.

- Knowledge of the locality and familiarity of the general geographic area. In particular, the consultant team must be **intentional** about how to communicate these technologies to a diverse set of public and private stakeholders.

DBE Goal

- ~~Think outside the box~~
- There is no box!

- Encourage introduction of firms who have not previously worked with KYTC/Planning
- Mentor through DBE/Prequal Process

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QUESTIONS?

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