KTRAC - FY2025 Grant Proposals

Microsoft Teams 2024-03-07

FY2025 Summary – 405c funding pot

- Total Submissions: 13
- Total Amount: $1,348,366.22

Plan

- In the meeting today:
  - Go through each project proposal
    - project director
    - ask questions if there are any
  - Decide whether to proceed with funding
- After the meeting today:
  - Continue working with the project directors on their proposal details
  - Submit to NHTSA for approval

NON-LE-2025-KBEMS-0041

- Title: Kentucky Emergency Medical Services Information System (KEMSIS) Maintenance and Enhancement
- Description: The Kentucky Emergency Medical Services Information System (KEMSIS) is the statewide initiative encompassing the certification and licensing of Emergency Medical Services (EMS) agencies, clinicians, and Training or Educational Institutions (TEIs), and the architecture, collection, analysis, and integration of statewide EMS agency and patient care data, to include the Kentucky State Ambulance Reporting System (KStARS), administered by the Kentucky Board of Emergency Medical Services (KBEMS).

NON-LE-2025-Universi-0027

- Title: Improving Data Quality in Kentucky's Trauma Data Bank
- Description: The Kentucky Trauma Data Bank (KTDB, formerly called Kentucky Trauma Registry) requests funding to continue support of its longstanding goals: supporting and improving the state's trauma system with timely, accurate, and accessible data that are amenable to integration with other motor vehicle crash (MVC)-related data. MVC injuries comprise a major portion of the KTDB and are an ongoing focus of data improvement. Kentucky's trauma system leadership is still working towards identifying a data management vendor recognized by the American College of Surgeons Committee on Trauma that is reliable and affordable. At this juncture, it is even more critical than usual to assure the quality of KTDB data and avoid unnecessary lapses as we move towards transition to a new system. Under the leadership of the Kentucky Trauma Advisory Committee, project staff will assess data quality, work towards system expansion, provide training to trauma registrars, perform a variety of data analyses, and present findings both in person and in written reports. We also continue advocacy for long-term sustainable trauma system funding with legislative champions for Kentucky trauma care.

NON-LE-2025-Universi-0042

- Title: FY 2025 Data Linkage
- Description: This project is an ongoing project to link three datasets across Kentucky: Crash, EMS, and Trauma. In this 5th cycle of the project we will continue to link the latest available data from the KSP crash data, the trauma data bank, and the KEMSIS data system. Additionally, we will focus on improving the data quality by diving deeper into the KEMSIS data queries. Additionally, with the larger repository of linked data now available, modeling of crashes specific to injury and EMS outcomes is feasible. As such, we will begin to develop use cases with the historical linked data as it applies to Highway Safety Manual and iRAP methodologies. Additionally, we will continue the development and maintenance of the dashboard to track data integration and progress in the linkage.

NON-LE-2025-Universi-0056

- Title: OHS: Traffic Records Assessment FY25 (Year 13)
- Description: This project will continue the regular assessment of the quality of Kentucky safety data (traffic records). It will also monitor implementation of the recommendations of the 2022 NHTSA Traffic Records Assessment.

NON-LE-2025-Universi-0057

- Title: OHS: Kentucky Traffic Safety Data Service-KTSDS FY25 (Year 8)
- Description: This project is a continuation of the popular Kentucky Traffic and Safety Data Service (KTSDS). The Kentucky Transportation Center (KTC) has considerable resources and expertise for identifying and addressing safety concerns using a variety of traffic records databases and tools. The aim of this study is to increase access to and integration of data from the six traffic record systems and especially to increase access to expert resources with a more in-depth knowledge of the databases. Accordingly, KTC will continue to market and host a free traffic data service to enable users to "access an expert" to conduct small studies and get answers to traffic safety problems which would ordinarily be out of reach due to a) difficulty and expense of contracting, or b) lack of awareness that such expert resources exist and are available to them.

NON-LE-2025-Universi-0058

- Title: OHS: Improving Accessibility of AADT Data for Safety Analysis on Local Roads
- Description: This project aims to (1) update the AADT estimates developed in a prior study with the latest data, and (2) integrate this AADT data into crash analysis. Since AADT has historically been unavailable for local roads, this project will improve safety performance analysis and safety planning on local roads.

NON-LE-2025-Universi-0059

- Title: OHS: Improving the Completeness of Road Data to Support Connected and Automated Vehicles
- Description: The USDOT has published its latest Automated Vehicles Comprehensive Plan (2021) with three goals to achieve its vision for Automated Driving Systems (ADS). 1. Promote Collaboration and Transparency; 2. Modernize the Regulatory Environment; and 3. Prepare the Transportation System. KYTC's role is important in all three goals, but especially relevant to the third, preparing the transportation system. The USDOT will conduct, in partnership with stakeholders, foundational research and demonstration activities needed to safely evaluate and integrate ADS, while working to improve the safety, efficiency, and accessibility of the transportation system. The deployment of connected and automated vehicles will impact many if not all KYTC functional areas, including finance, planning, design, construction, maintenance, safety, and operations.

    - This project would focus on important elements for preparing for CAV deployment, data availability and completeness needs. First, we propose to review other state DOT data programs as related to connected and automated vehicles. Next, working closely with KYTC planning and operations staff, the team will review and report on current KYTC data practice and availability of data to support deployment of CAVs. In particular, we will focus on HIS and asset management systems maintained by KYTC as well as private and publicly available data that may have value. We seek to identify gaps between the existing and needed data.

    - The results of the project should help KYTC position the agency for future data directives or grant opportunities related to CAV data and deployment.

NON-LE-2025-Universi-0060

- Title: OHS: Improving the Quality of Pedestrian and Bicycle Crash Data through Narrative Mining
- Description: Crash narrative offers a wealth of contextual information surrounding why and how a crash occurs, including the sequential actions from both drivers and pedestrians/cyclists leading up to the collision. This project aims to conduct an in-depth investigation of pedestrian and bicycle crashes by leveraging the insights provided by crash narratives. The project will integrate crash and roadway (including intersection) databases and enhance the accuracy of crash attribution and completeness of crash database.

NON-LE-2025-Universi-0062

- Title: Crash Data Analysis Tool Update
- Description: Kentucky State Police provides a feature-rich tool for secure public and private access to Kentucky crash data called “KYOPS”. This secure portal is sufficient for tabulation and rudimentary analysis, however advanced crash analysis can require significant data post-processing.

  - The Transportation Cabinet monitors lane departure, cable crossover, and other specific crash types routinely. These crash types are based on complex algorithms using several crash and roadway data and they are stored as crash flags that are easy to query against but absent from the existing system. Many of these flags are based on research and new flags are being created often including analysis based on the Highway Safety Manual (HSM). A tool is needed to be able to make use of these flags for better safety analysis.

  - The Crash Data Analysis Tool (CDAT) fills an important need for safety analysis. This tool uses a static annual snapshot of crash data for reproducible analysis that is perfect for research and safety applications. It utilizes best practices and standardizes algorithms to reduce the likelihood of errors in analysis. CDAT works like a web form, which gives far broader access to safety experts to perform better safety analysis with the most modern tools and techniques.

NON-LE-2025-Universi-0064

- Title: Emerging Vehicle Safety Features
- Description: NHTSA states that newer vehicles are safer vehicles (https://www.nhtsa.gov/newer-cars-are-safer-cars). They attribute the use of equipment such as electronic stability control, backup cameras, blind spot detection, and driver assistance to safer vehicle occupant protection.

    - The vehicle database currently has fields for airbag and seatbelt safety features, leaving a gap in completeness when considering newer available vehicle safety features.

NON-LE-2025-Universi-0066

- Title: Work Zone Speed Assessment
- Description: This project aims to 1) gather motor vehicle speed data associated with work zones in Kentucky from the HERE database in addition to data collected by roadside speed limit traffic signs located in work zones; 2) analyze the data to determine average overall speed, highest recorded speeds, and rate of vehicles driving above the posted speed limit; 3) link the data with crash database and citation database and determine the extent to which any correlations may exist; and 4) use crash and citation data to determine if distraction due to cell phone use is a contributing factor to driving above the posted speed in work zones.

NON-LE-2025-Universi-0067

- Title: OHS: Kentucky MMUCC Report Card
- Description: The Model Minimum Uniform Crash Criteria (MMUCC) is a voluntary crash reporting guideline with a standardized set of data variables to describe motor vehicle traffic crashes. The goal of the MMUCC is to help standardize crash reporting nationwide, allowing for the identification of traffic safety problems and design countermeasures to improve traffic safety. In January of 2024, NHTSA published the 6th edition of the MMUCC which includes new suggestions to ease electronic data collection.

- Additionally, Kentucky is currently in the process of redesigning its electronic crash data collection system. A thorough understanding of the latest changes, additions, and suggestions outlined in the 6th edition of the MMUCC would enhance Kentucky's efforts in redesigning the crash data collection process.

NON-LE-2025-Universi-0068

- Title: Improving Kentucky Crash Severity Data Through Integration of Health-Related Databases
- Description: This project will assess and improve the accuracy, completeness, and integration of the Kentucky crash database through the systematic integration of health-related databases that include medical-based reporting of crash injury severity. The team proposes to link emergency department, inpatient hospitalization, and outpatient hospitalization records with crash records to greatly improve the quality of crash severity information available to safety practitioners.

Approve/Deny

- Poll the attendees

State Electronic Data Collection Grant

- More details now
- Allowed 1 application per state
- Will be reaching out

Safe Streets and Roads for All (SS4A) Program

- Open again
- https://www.transportation.gov/grants/SS4A

Updates or other items

- Open the floor

Thank you for attending

- Please reach out if you have any questions