



Commonwealth of Kentucky
Finance and Administration Cabinet
OFFICE OF THE SECRETARY
Room 383, Capitol Annex
702 Capital Avenue
Frankfort, KY 40601-3462
(502) 564-4240
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Andy Beshear
Governor

Holly M. Johnson
Secretary

March 3, 2021

The Honorable Rick Girdler, Co-Chairman
The Honorable Chris Freeland, Co-Chairman
Capital Projects and Bond Oversight Committee
Legislative Research Commission
Frankfort, Kentucky 40601

Dear Senator Girdler, Representative Freeland, and Members of the Capital Projects and Bond Oversight Committee:

In accordance with the provisions of KRS 45.750-800, the Finance and Administration Cabinet is reporting the attached actions involving:

Approval of Equipment Purchase in Excess of \$200,000

Transportation Cabinet, Department of Highways, Light Detection and Ranging (LiDAR) hardware and software in the amount of \$825,000 funded with Federal Funds.

Sincerely,

A handwritten signature in blue ink that reads "Holly M. Johnson".

Holly M. Johnson
Secretary

Attachments

Date: March 1, 2021
Agency: Transportation Cabinet
Project: Light Detection and Ranging (LiDAR) hardware and software
Account Number: Not yet established
Type of Action: Approval of Equipment Purchase in Excess of \$200,000

The Secretary of the Finance and Administration Cabinet has approved the purchase of major items of equipment in the amount of \$825,000 for LiDAR hardware and software for each of the Cabinet's three Asset Collection Vans to be used by the Department of Highways. This LiDAR equipment uses lasers and sensors to produce a realistic representation of the scanned environment. This data collection is a requirement of the Federal Highway Administration (FHWA) and is utilized by the Cabinet. The LiDAR equipment on the vans will be paid from Federal Funds.



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March 3, 2021

Ms. Robin Brewer
Transportation Cabinet
200 Mero Street
Frankfort, Kentucky 40601

Dear Ms. Brewer:

This letter is to inform you that your request to report acquisition of three Light Detection and Ranging (LiDAR) equipment systems in the amount of \$825,000 with each in excess of \$200,000 to be purchased with federal funds is approved. The source of funds is from the Federal Highway Administration.

This action will be on the agenda of the Capital Projects and Bond Oversight Committee currently scheduled for Tuesday, March 16, 2020 at 3:00 pm in Room 171, Capitol Annex. Please have a representative familiar with this project in attendance for any related questions the committee may have.

Sincerely,

A handwritten signature in blue ink that reads "Holly M. Johnson".

Holly M. Johnson
Secretary



COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET

transportation.ky.gov

Andy Beshear
GOVERNOR

Jim Gray
SECRETARY

February 23, 2021

Secretary Holly M. Johnson
Secretary of the Finance & Administration Cabinet
702 Capitol Avenue
Room 383, Capitol Annex
Frankfort, Kentucky 40601

Dear Secretary Johnson:

The Transportation Cabinet requests authorization for the acquisition of Light Detection and Ranging (LiDAR) hardware and software for three asset collection vans owned by the Cabinet for the Department of Highways, each in excess of \$200,000, as capital projects which will be financed with over 50% in Federal Funds in accordance with KRS 45.760 (7)(a). The LiDAR equipment will cost \$275,000 for each of our three vans for a total amount of approximately \$825,000. The LiDAR equipment on the vans will be paid from Federal Funds.

This request would allow the Cabinet to procure equipment and software to support LiDAR technology to assist with Project Development, Highway Safety, and Asset Management efforts. LiDAR makes use of lasers and sensors to produce a realistic representation of the scanned environment. This LiDAR equipment for our asset collection vans is used to create an accurate three-dimensional model of a scanned environment in a single pass. The point cloud produced by the system can be utilized to take 3D measurements of roadside assets, including width, height, and length, surpassing the measurement capabilities of 2D images. LiDAR allows for identification, measurement and extraction of assets including: pavement markings, signs, guardrail, and retaining walls. It can also produce a fully interactive model of any scanned environment including providing grade and slope for planning and construction verification purposes. In addition, this equipment will provide inventory extraction of assets, extraction of geometric features and properties for analysis, post construction quality control, as built documentation, and topographic studies for planning.

This equipment will provide critical data to the Cabinet about the condition of its assets and infrastructure across the State and will be used for future projects as well. Such data is required for the Federal Highway Administration (FHWA), and without providing such data, it could jeopardize the Cabinet's federal funding in the future. Compliance with these federal requirements is necessary to allow Kentucky to continue receiving our full apportionment of federal highway funding (over \$700 million annually).

Your consideration of this request is appreciated. Please let me know if you need additional information.

Sincerely,

Robin Brewer

Robin Brewer
Executive Director
Office of Budget and Fiscal Management