

Daniel R. O'Donnell  
County Administrator

County of Roanoke



## Memo

To: Roanoke County Board of Supervisors

From: Daniel R. O'Donnell, County Administrator *AD*

Date: March 9, 2020

Subject: FY 2021 Budget Memo #5: Additional funds for the Diesel Exhaust Removal System

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At the February 25, 2020 work session on the County Administrator's Proposed Fiscal Year 2021-2030 Capital Improvement Program (CIP) and Capital Project Status Update, Vice Chairman Mr. Phil North asked staff if additional funds could be added to the Diesel Exhaust Removal System project.

After discussion between the Finance and Management Services staff and Chief Steve Simon, it was determined an additional \$100,000 of Department of Fire Programs funding could be utilized for this project.

A revised CIP Diesel Exhaust Removal System Project description is attached. This change includes an additional \$50,000 allocated to FY 2021, \$50,000 allocated to FY 2022, and final funding for the project in FY 2023.

This change will be added to the Proposed Fiscal Year 2021-2030 Capital Improvement Program (CIP) and included in the upcoming Fiscal Year 2021 Budget for your approval.

If you have any additional questions, please contact Laurie Gearheart, Director of Finance and Management Services at 540-283-8126 or [llgearheart@roanokecountyva.gov](mailto:llgearheart@roanokecountyva.gov).

cc: Rebecca Owens, Assistant County Administrator  
Richard Caywood, Assistant County Administrator  
Laurie Gearheart, Director of Finance and Management Services  
Meredith Thompson, Budget Division Director



**Diesel Exhaust Removal System**

Department: Fire and Rescue/General Services

Category: New Facilities

Location: Countywide Fire and Rescue Stations

Est. Useful Life: Varies

Magisterial District: Countywide

Project Status: Planned

**Financial Summary**

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
<b>Total Project Cost</b>	500,000	50,000	100,000	50,000	300,000	0	0	0	0	0	0	0	450,000
<b>Funding Sources</b>													
Roanoke County -													
Unrestricted Cash	200,000	50,000	100,000	50,000	0	0	0	0	0	0	0	0	150,000
Lease/Revenue Bonds	300,000	0	0	0	300,000	0	0	0	0	0	0	0	300,000
<b>Total Funding Sources</b>	500,000	50,000	100,000	50,000	300,000	0	0	0	0	0	0	0	450,000
<b>Operating Impacts</b>			0	0	0	0	0	0	0	0	0	0	0



**Project Summary:**

The Diesel Exhaust Removal System project will install emission capture equipment in approximately 60 apparatus bays to capture diesel emissions. This project mounts an exhaust filtration equipment to capture nearly 100% of these emissions. The Fire and Rescue Department has planned the use of Department of Fire Program funds in the amount of \$50,000 in FY 2020, \$100,000 in FY 2021, and another \$50,000 in FY 2022 to purchase units at stations. Bond funding in FY 2023, in the amount of \$300,000, will purchase units at the remaining fire station facilities.



*Diesel Exhaust Removal System (continued)*

**Project Description and Justification:**

The Diesel Exhaust Removal System project will install emission capture equipment in approximately 60 apparatus bays to capture diesel emissions. This project mounts an exhaust filtration equipment to capture nearly 100% of these emissions.

Most fire apparatus and emergency response vehicles run on diesel fuel. The exhaust from these vehicles is expelled directly into the station bays. An apparatus-mounted exhaust filtration device will capture nearly 100% of these emissions resulting in a cleaner environment.

The Fire and Rescue Department has planned the use of Department of Fire Program funds in the amount of \$50,000 in FY 2020, \$100,000 in FY 2021, and another \$50,000 in FY 2022 to purchase units at stations. Bond funding in FY 2023, in the amount of \$300,000, will purchase units at the remaining fire station facilities.

**Additional Operating Impacts:**

There is no anticipated additional operating impact with this project. The filtration devices come with a one-year warranty. Maintenance, repair, and replacement filter costs are anticipated to be covered by the existing budget when equipment is installed.

**Conformance with Plans, Policies, and Legal Obligations:**

This project relates to the departmental goal of maintaining compliance with National Fire Protection Association (NFPA), specifically the NFPA 1500 standard, which specifies the minimum requirements for an occupational safety and health program for fire departments.

**Project Highlights and Key Milestones:**

- Exhaust filtration device will capture nearly 100% of vehicle emissions into station bays.
- Total cost for this project is approximately \$500,000.
- Project is planned to receive \$50,000 in Department of Fire Programs funding with \$50,000 in FY 2020 and FY 2022, and \$100,000 in FY 2021, for a total of \$200,000.
- Bond funding in FY 2023 will fund the project an additional \$300,000 to install systems in remaining stations.
- Project originally planned for FY 2026 in prior CIP, but staff have identified this project as a priority to fund sooner.

Community  
Strategic Plan

Ensure Citizen Safety

Public Safety Facilities &  
Equipment