

## RFQ 24-1: BENEFITS ASSESSMENT OF ACCELERATED TURNOVER OF THE ON-ROAD DIESEL VEHICLE FLEET IN THE UNITED STATES

This file includes answers to questions posed by participants of the applicant informational webinar held March 19, 2024. If you do not find an answer to your question here, you can consult our [frequently asked questions page](#) or email Dr. Allison Patton at [apatton@healtheffects.org](mailto:apatton@healtheffects.org) for more information.

### Eligibility and Review Process

<b>Will there be a preliminary application stage for this RFQ and are full proposal submissions by invitation only?</b>	There is no preliminary application stage for this RFQ, and anyone who is eligible is welcome to submit a full application. All applicants are asked to email their intent to apply by April 4, 2024, and to submit their full applications by April 18, 2024. A full application may be submitted even if the intent to apply was not submitted.
<b>Are multiple Principal Investigators (PIs) allowed on one project?</b>	HEI encourages one PI per project, but multiple PIs are allowed when there is proper justification provided.
<b>Can there be collaboration with researchers outside the US?</b>	Collaborators can be outside of the US if they are relevant to your project, but the PI and study site must be US-based.
<b>Should owners and operators of medium- or heavy-duty diesel vehicles be coinvestigators or collaborators on the proposal submission?</b>	No, truck owners and operators should not be co-investigators. Under Aim 3, they should be people with whom you engage, but they should not be a part of the main study team.
<b>Are consulting companies eligible to apply to this RFQ?</b>	Yes, consulting companies are welcome to apply to this RFQ as the lead institution. (Note that this is different from most HEI research solicitations.)
<b>If we work for a regulatory governmental agency but our unit is non-regulatory, would we still be ineligible to apply?</b>	As a non-regulatory body, you cannot apply as a PI, but you can be a member of the research team.
<b>Who will comprise the reviewer panel?</b>	The <a href="#">HEI Panel on Heavy Duty Diesel Fleet Turnover</a> will review full applications and provide funding recommendations to the HEI Board of Directors. Applications might also be sent to external scientists for additional evaluation: (1) when a specific aspect that is not covered by expertise on the Panel needs to be evaluated or (2) when Panel members have a conflict of interest with a particular proposal and are barred from participating in the review of that proposal, leaving the Panel short-handed in that area of expertise.

## Budget

<b>How many proposals do you expect to fund?</b>	We expect to fund one study under this RFQ, with a maximum total budget of \$500,000.
<b>Are subcontracts allowed?</b>	Yes, subcontracts or consultants to the study are allowed. They can be either at the same institution or different institutions. There should be one lead institution and principal investigator as the main contact for HEI.
<b>Are there limits on overhead?</b>	For-profit institutions should contact HEI to discuss any indirect costs or fees. As is usual for HEI, indirect for non-profit institutions is capped at 30% of direct costs, and applications should go through the normal processes for their institutions.
<b>Are funds for the purchase of equipment included in these projects? And are purchases of data and software allowed?</b>	Yes, purchase of new equipment can be included as part of your budget, and yes, those other purchases are allowed. The instructions for the budget and application can be found at <a href="https://www.healtheffects.org/research/funding/application-instructions">https://www.healtheffects.org/research/funding/application-instructions</a> .

## RFQ Scope

<b>Is the goal of this RFQ to address specific actions or interventions?</b>	This is not an intervention or pre/post study. The goal is to assess the potential benefits of turnover of older diesel vehicles, however that might be achieved, in the next 5-10 years. The base year for analysis should be the most recent year with sufficient data available to achieve the aims.
<b>Are you primarily focused on forthcoming efforts, or are you also considering historical regulatory actions?</b>	We are focused mainly on what can be done now in the near term. Evaluation of historical regulatory actions might be relevant if the analysis informs new actions.
<b>From which sources do you anticipate the action to originate: regulatory entities or community-initiated efforts?</b>	The purpose of the RFQ is to quantify potential benefits and inform the next steps, and we hope anyone who might benefit, including regulatory agencies and communities, is able to use the results.
<b>Do all classes of trucks need to be examined or is a subset okay?</b>	The primary objective of the RFQ is to examine potential benefits of fleet turnover; so, whatever subset of medium- and heavy-duty diesel vehicles would be pertinent to your study is acceptable.
<b>Are you mainly interested in impacts of heavy-duty diesel trucks or would a focus on other vehicles like buses or Amazon delivery vehicles also be relevant?</b>	The focus of this RFQ is primarily on large, heavy-duty diesel vehicles, but we are also interested in buses and smaller delivery vehicles that are concentrated in specific diesel emissions hotspots.

<p><b>Are you investigating emissions reductions from a single fleet of heavy-duty trucks or from all heavy-duty trucks within the site of interest?</b></p>	<p>The vehicles of interest are medium- and heavy-duty diesel vehicles that operate in and around the study site, whether or not they are part of the same fleet. This is not a nationwide study where a single fleet of vehicles is being replaced.</p>
<p><b>Would HEI be open to explore doing this work in a truck-burdened hotspot community in California, which has already experienced heavy-duty fleet turnover, but the impacts of that turnover have not been quantified?</b></p>	<p>The main purpose of this RFQ is to assess the potential benefits of fleet turnover from older medium- and heavy-duty diesel vehicles. The site should be someplace where there likely have been benefits or will be benefits to additional turnover of those vehicles. If you can quantify the benefits of fleet turnover of older vehicles that has already occurred and benefits of further fleet turnover, it would be responsive. The RFQ is open to any sites in the United States or approaches that provide answers to the research question and address all three aims of the RFQ.</p>
<p><b>We have seen 2011 and later trucks with high NO<sub>x</sub> due to deterioration and tampering. Could retiring or repairing those types of trucks be considered in the project if we can show they are important?</b></p>	<p>We are primarily interested in fleet turnover of older trucks, but information on retiring or repairing newer trucks with high emissions due to deterioration or tampering could also be responsive. This is related also to the question about the California site that has already experienced fleet turnover. The RFQ is about being able to quantify the potential benefits of renewing diesel trucks and not just in terms of model year, but also in terms of emission control, technology, and other factors.</p>
<p><b>Which pollutants should the proposed work include?</b></p>	<p>The pollutants that are measured or modeled should be emitted by medium- and heavy-duty diesel vehicles and be relevant to policy or health. Inclusion of nitrogen oxides (NO<sub>x</sub>) is required, with consideration of the effect of emission control technologies on the ratio of nitrogen oxide (NO) to nitrogen dioxide (NO<sub>2</sub>). Other potentially relevant pollutants should be included, for example, black carbon, elemental carbon, primary PM<sub>2.5</sub> emissions, ultrafine particles, or mobile source air toxics.</p>
<p><b>Could we have a site in mind and indicate this when we submit the proposal? In this case, is Aim 1 more about justifying why we choose a particular community?</b></p>	<p>Yes, applicants may have a site in mind when submitting the proposal. If the application includes a proposal to conduct the work at a specific site, the application must rigorously justify the selection of the site based on the RFQ criteria. The application should discuss why this is a valuable place to conduct the study and describe any partnerships that are already in place. If possible, the proposal should provide evidence for why the proposed site is considered a hotspot for diesel emissions.</p>
<p><b>Are teams who do not have a hotspot site selected by the time of submission at an inherent disadvantage compared to teams who intend to identify the site during the project?</b></p>	<p>Proposals will be evaluated holistically, and the site selection will need to be rigorously justified, either by completing Aim 1 during the study period or by providing the justification for a specific site in the proposal. The method for study site selection will be evaluated as part of the proposal review, but there will not be a preference for teams based on whether a study site has already been selected at the proposal stage.</p>

<b>Does the site need to be in a community already burdened with health problems, such as an environmental justice community?</b>	The site should be one where the people who live at or near the hotspot would potentially benefit from fleet turnover. A site near an environmental justice community might meet this requirement, but other types of sites could also qualify and help achieve the goals of the RFQ.
<b>Are your objectives to get a nation-wide survey of diesel emissions or can case studies be proposed?</b>	The RFQ is intended to fund a local-scale study with a focus on a hotspot of diesel emissions. It is not a nationwide study, but lessons from the study that could be scaled or transferred to a nationwide level would be useful.
<b>Could you provide insight into the scale of the site in question?</b>	The scale of the site should be large enough to allow for benefits assessment and engagement, and small enough that the focus is on a hotspot of emissions from older medium- and heavy-duty diesel vehicles. The proposal should explain how the scale of the site was chosen.
<b>Which members of the research team need biosketches?</b>	All key investigators, including community partners if they are a key part of the research team, should provide information about their relevant background or expertise. We recommend that co-investigators from academia submit a biosketch using the provided form or similar.

## Data Collection, Analysis, and Engagement Methods

<b>Is there any preference for primarily collected truck activity data specific to the study site?</b>	This is a local-scale study, and whatever data would be pertinent to the site at the local level are acceptable. We do not have a preference for primary data collection or secondary data use, as long as the data are appropriate for their intended use and fit the study timeframe. Data collection methods and quality assurance and quality control will be considered for all data used in the study.
<b>Are there specific models and software that should be used?</b>	No, we are not specifying any software, models, or specific datasets. The proposed methods should be able to answer the research question.
<b>Does this RFQ include health analysis or are other types of benefit assessments accepted?</b>	We are interested in assessment of the potential effects of fleet turnover on emissions, air quality, exposure, and health. The type of benefits assessment that is proposed will be considered in the context of the scope of the overall proposal and what can be achieved in the timeframe of the study. Health impact assessment is welcome, and stopping at exposure would also be informative and responsive to the goals of the project.
<b>Would it be helpful to know which diesel trucks are contributing the most to the potential community burden?</b>	Addressing which medium- and heavy-duty vehicles might have more potential benefits would be relevant to the aims of the RFQ.

<p><b>Specific Aim 3 states, “owners and operators of medium- or heavy-duty diesel vehicles and other audiences who are potential beneficiaries of fleet turnover or have relevant experience.” Could we interpret the other audiences to be community members or NGOs that could stand to benefit from fleet turnover?</b></p>	<p>For Specific Aim 3, the other audiences who are potential beneficiaries can include school districts; municipal, state, or federal governments; transit providers; or community groups. The only audience that must be engaged under Aim 3 is owners and operators. Engagement with any other audiences that might be involved in fleet turnover, including community members or NGOs, is encouraged when applicable.</p>
<p><b>Can you give an example of the type of engagement that you would like to have with the truck operators? Would it be a survey on their likelihood to adopt newer technologies?</b></p>	<p>The purpose of engagement with owners and operators is to understand what has prevented faster turnover. The types of engagement are open to applicants as long as the chosen techniques inform future decisions on what the potential opportunities and challenges might be.</p>
<p><b>Do the potential benefits need to be presented in a specific form, for example as rates of reduction in emissions or concentrations, as exposure benefits or health markers, or as changes in air toxicity?</b></p>	<p>The potential benefits should be presented in a form that makes sense in context, and the proposal should explain how you plan to present the potential benefits and results.</p>
<h2>Past and Current Research Solicitations</h2>	
<p><b>I have submitted a proposal to HEI under a different research solicitation. Should I remove any overlap with the previous proposal when responding to this new solicitation?</b></p>	<p>Each research solicitation has different objectives and may have funding recommendations made by different committees or panels. If you are applying to multiple solicitations, please consider the applications as independent proposals. As with any project, please indicate any potentially overlapping current or pending funding when applying.</p>
<p><b>Where can I find information on all open research solicitations?</b></p>	<p>Information on active HEI research solicitations can be found at <a href="https://www.healtheffects.org/research/funding/">https://www.healtheffects.org/research/funding/</a>. Opportunities for HEI Energy funding can be found at <a href="https://www.heienergy.org/funding-opportunities">https://www.heienergy.org/funding-opportunities</a>.</p>
<p><b>What is the best way to see previously funded</b></p>	<p>Information on some of HEI’s previous work on diesel emissions can be found at <a href="https://www.healtheffects.org/air-">https://www.healtheffects.org/air-</a></p>

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**studies by HEI, especially those that look at diesel emissions?**

[pollution/diesel-exhaust](https://www.healtheffects.org/pollution/diesel-exhaust). Information on ongoing research funded by HEI is available at <https://www.healtheffects.org/research/ongoing-research>. HEI reports are all available at <https://www.healtheffects.org/publications>.

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## Miscellaneous

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**Will you be making available the list of participants in this webinar?**

No.

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**How can I stay informed on other activities at HEI?**

[Sign up to receive emails from HEI](#), including our monthly newsletter – The Monitor.

You can also follow us on social media: [LinkedIn](#), [X](#), [YouTube](#).

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