



## GRANT INSIGHTS

The purpose of the Exploratory Advanced Research (EAR) Program is to address the need for longer-term, higher-risk breakthrough research with the potential for transformational improvements to plan, build, renew, and operate safe, congestion-free, and environmentally sound transportation systems. The goal of this program is to collect diverse pedestrian data, provide researchers with access to it, and encourage novel approaches for analysis of diverse data to increase the safety and mobility of all people. Program funds are authorized through the Infrastructure Investment and Jobs Act (IIJA).

The agency intends to award projects aligned with the Administration's Goals of improving safety for vulnerable road users, addressing equity for communities disproportionately affected by vehicle traffic, and advancing transportation transformation.

<b>Federal Agency Name</b>	<b>U.S. Department of Transportation - Federal Highway Administration (FHWA)</b>
<b>Funding Opportunity</b>	<b>Exploratory Advanced Research (EAR) Program</b>
<b>NOFO Release Date</b>	04/19/2024
<b>Application Due Date</b>	06/05/2024 by 11:59 p.m. EST via <a href="http://www.Grants.gov">www.Grants.gov</a>
<b># of Programs:</b>	Track A: Proposals for the collection and preparation of diverse pedestrian data Track B: Proposals to conduct research designed to take advantage of diverse pedestrian data
<b>Total Funding Available</b>	\$2,000,000
<b>Award Minimum</b>	N/A
<b>Award Maximum</b>	\$250,000
<b>Recipient Cost-Share/ Match Requirements:</b>	Applicants must provide at least 20% of the total project costs via in-kind (non-federal) matching contributions.
<b>Summary</b>	<p>Track A - Data Collection and Preparation:</p> <ul style="list-style-type: none"> <li>Collection should include close partnerships with relevant diverse stakeholders and communities throughout the process from research design and collection through data curation and access management.</li> <li>Collection should consider a balance between providing ease of use of the data by qualified researchers and privacy protection to individuals represented in the data.</li> <li>Data preparation should consider the use of novel methods to reduce the manual burden and improve the quality of pedestrian detection and classification.</li> </ul> <p>Track B - Research:</p> <ul style="list-style-type: none"> <li>Research, like Track A, would benefit from partnerships with relevant stakeholders and communities throughout the process.</li> <li>Proposals should provide clear research objectives. For example, use of pedestrian data for design of safety countermeasures; explain how diversity of pedestrian data is necessary for the research objectives; and include metrics to demonstrate if and to what extent results improve traffic safety, mobility, or convenience for all or specific groups of pedestrians.</li> </ul>



<p><b>Eligible Applicants</b></p>	<ul style="list-style-type: none"> <li>This program is open to all sources.</li> </ul> <p>*An applicant may submit only one proposal for Track A and one proposal for Track B, for a maximum of two proposals as the prime applicant.</p> <p>**An applicant may be listed as a subrecipient on other applications submitted by a different prime applicant.</p>
<p><b>Special Considerations</b></p>	<p>Administration Goals:</p> <ol style="list-style-type: none"> <li>Safety of Vulnerable Road Users: Current traffic control technologies and design practices are based on data representing only a limited group of pedestrians. Greater diversity of data can ensure new technologies and design practices work for pedestrians with different needs and behaviors.</li> <li>Equity: Particularly for communities (including rural communities) that may disproportionately experience consequences from vehicle traffic. Current pedestrian data is primarily obtained at signalized intersections. There is very limited data on pedestrians in other contexts. For example, in areas that lack sidewalks and where people may walk along shoulders of rural, two-lane roads. Accordingly, there is limited evidence to support how design decisions may impact the safety of pedestrians in rural areas.</li> <li>Transformation Advancement: In addition to seeking collection of more diverse data, this notice also seeks to fund projects that utilize new methods that dramatically increase the ability to process data into useful information that can be shared with researchers.</li> </ol> <p>The FHWA anticipates substantial Federal involvement between FHWA and the Recipient during the execution of awarded projects.</p>
<p><b>Notes</b></p>	<p>Pedestrian Data: May include data from camera and video image sensors, radar, light detection and ranging (LiDAR) technology, and mobile devices or a combination of sensors located at the roadside, mounted on vehicles, or carried by pedestrians themselves.</p> <p>Data that represent the diversity of pedestrian activity include:</p> <ul style="list-style-type: none"> <li>Data capturing diverse pedestrians include people of different ages, genders, races, ethnicities, and abilities—which includes people who use assistive devices (such as wheelchairs, white canes, etc.) because of conditions that impact mobility, sensing, or cognition.</li> <li>Data collected in diverse locations including different types of controlled and uncontrolled intersections, mid-block crossings, urban and non-urban areas, areas with sidewalks and without sidewalks or other pedestrian-oriented features, and other physical factors in the roadway design or surrounding land use that could affect pedestrian behavior.</li> <li>Data from diverse environments including different times of day or night, different weather conditions, and different climates.</li> <li>Data derived from diverse sensor locations and types such as different types of video cameras, camera mounting locations, and data file formats.</li> </ul>
<p><b>Contact Information</b></p>	<p>Title: FHWA Agreement Officer - Primary Contact Name: Ryan Buck Email/phone: <a href="mailto:SIRCFHWA@dot.gov">SIRCFHWA@dot.gov</a> (preferred); and (202) 366-4229</p> <p>Title: FHWA Agreement Officer/Team Leader - Alternate Contact Name: Robin Hobbs Email/phone: <a href="mailto:SIRCFHWA@dot.gov">SIRCFHWA@dot.gov</a> (preferred); and (202) 366-4004</p>

