

Walking as a Mode of Transport

SECOND CALL FOR PROJECT PROPOSALS **Research Grants 2024 For Exploratory Projects**

VREF invites applications for research grants to support projects that will be implemented 2024 within the VREF program “Walking as a Mode of Transport”. This Call is the second one in the program. Deadline for submission of applications is 15 September 2023.

The Volvo Research and Educational Foundations (VREF) is an independent foundation that inspires, initiates and supports research and educational activities that can contribute to new knowledge on broad issues related to urban mobility and access. VREF’s mission is to support the development of research on ideas, approaches and solutions that can contribute to equitable access and sustainable urban mobility in ways that can radically reduce transportation’s negative local and global environmental impacts. An important goal is also to support educational programs in these areas, as well as facilitate dissemination and implementation of research findings among both university researchers, practitioners, decision-makers and other relevant stakeholders, see Volvo Research and Educational Foundations (www.vref.se).

1. Background: VREF Program “Walking as a Mode of Transport”

In 2021 VREF launched a new initiative for funding research and education on walking as a mode of transport (hereafter referred to as the “Walking program”). The objective of the program is to strengthen international research and research capacity on walking as a mode of transport in ways that can contribute to more equitable access and sustainable mobility in urban transport. The program also seeks to build a broad, international and interdisciplinary community of learning which encompasses both researchers and other stakeholders in this

area, as well as to support and contribute to new knowledge among “next generation” scholars in walking research. Finally, an additional aim of the program is to strengthen research capacity on walking as a mode of transport in the Global South.

An important point of departure for VREF’s initiative are the indications that despite its ubiquitous presence in everyday life (particularly in the Global South), walking as a mode of transport has not received extensive research or policy attention to date. In addition, while walking has been a research topic in certain academic contexts for many years, work on walking as a mode of transport has not yet developed into a cogent research direction, area or subject in itself.

The Walking program will encompass research and other initiatives that focus on walking both in itself and as part of a travel chain that also includes other modes of transport, such as public transport. Four core themes have been identified as the prioritized focus for the program:

CORE THEME 1 Conceptualizing and critically appraising walking as a mode of transport

CORE THEME 2 Walking as transport in everyday urban life; equity issues

CORE THEME 3 Governance, policy and urban planning for walking as a mode of transport

CORE THEME 4 Services, tools and business models to facilitate walking as a mode of transport

Brief descriptions of the themes are provided in Appendix 1 to this Call.

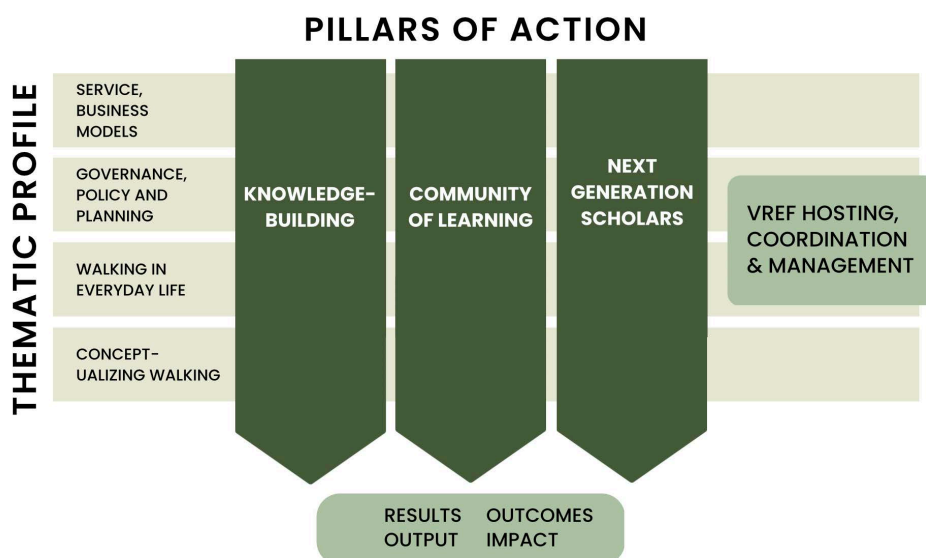
The Walking program will be implemented through three pillars of action:

1. Knowledge building
2. Community of learning
3. Next generation scholars

Through the “Knowledge building” pillar, VREF aims to provide resources for supporting initiatives and opportunities for creating new knowledge, particularly focusing on comparative work and international research collaboration among university scholars. The Community of Learning pillar will focus on communication, exchange and learning activities among a network of researchers and other experts, framed around the findings of research, as well as strengthen the outreach and communication of research findings beyond academic channels.

The overall aim of the Next Generation Scholars pillar is to support and enhance the regrowth and renewal of academic capacity in the field through capacity building and career development for young scholars, as well as improved education on bachelor, master and Ph.D. levels.

The overall structure of the program is presented in the figure below, as represented by a combination of the four core themes and the three pillars of action.



The program will be carried out in three phases of development 2023-2029. For more information on the Walking program see www.vref.se

2. The current Call – Exploratory Research Projects

The current Call is the second call for proposals for exploratory research projects within the Walking program. The call focuses on small, cross-disciplinary research projects within the four core themes of the Walking program which are indicated above. Projects will be carried out during a twelve-month period starting early 2024.

The Call is directed at exploratory, comparative research on issues that are relevant to the themes. The work can entail the exchange of e.g. empirical work (such as case studies), methodologies, analytical tools, data collection, policy experiences or research results from work on walking as a mode of transport in specific urban contexts. This type of comparative research can encompass both the exchange of in-depth knowledge that has already been accumulated over time but has not previously been placed in a comparative perspective, as well as new, exploratory work on emergent issues or approaches within the respective thematic areas. VREF particularly welcomes projects that encompass comparative work, approaches and perspectives from different urban contexts and regions, such as comparative analysis of relevant dimensions of walking in specific areas in the Global North and the Global South.

VREF foresees that successful research proposals will approach these issues through cross-disciplinary approaches that link perspectives and approaches from multiple disciplines or areas within e.g. engineering, social sciences, behavioral sciences, and the humanities. VREF

also welcomes projects that engage university scholars who have not previously carried out transport-related research or who have not previously been part of VREF's research network. Project teams are also urged to engage relevant international expertise to complement the core competence of the applicant team(s).

Projects which are funded by VREF are normally expected to result in at least one scientific publication concerning research results, as well as a summary of fundings and reflections on project experiences according to a VREF report template (will be provided to all project leaders).

3. Criteria for projects

3a. Eligibility criteria

Proposals must fulfill the following eligibility criteria:

- The project leader must be based in an university or a research institute of academic standing¹;
- Projects must include comparative work from urban areas in at least two different countries;
- Projects must be directed at generating new knowledge that clearly addresses issues in at least one of the core themes (listed above) of the Walking program.

The Walking program particularly welcomes project proposals with the following profiles:

- Projects that engage young scholars as members of the research team
- Projects that reflect gender balance in the work of the research team
- Project teams that consist of researchers from at least two different universities/research institutes (other partners, such as cities, organizations from civil society or NGOs may also be included).

Researchers who are currently engaged in ongoing VREF-funded projects within the Walking program (or relevant areas of the VREF MAC program, see www.vref.se) are eligible to apply for continuations or "next phases" of projects which build on the results and experiences of the ongoing projects.

3b. VREF's review criteria

All proposals which fulfil the eligibility criteria will be evaluated with regard to the following criteria:

- Originality and potential of the project idea
- Scientific quality and scientific relevance
- Project design and methodology
- Capacity and organization of the proposing team
- Outcomes and outreach

¹ By "research institute of academic standing", VREF means that the institute is conducting research of high scientific quality (e.g. resulting in peer-reviewed publications).

4. Budget and timeframe

The total budget for this Call is 4 million Swedish crowns, SEK (approx. 380,000 Euros). VREF envisages supporting up to eight projects, each with a grant up to 500,000 Swedish crowns, SEK (approx. 44,000 Euros). The project grant can be used to cover costs for salaries, travel, equipment, possible workshops/project meetings and other costs directly linked to project implementation.

Within the budget framework, the equivalent of 20,000 SEK (approx. 1,700 Euros) should be allocated to cover costs of participation in VREF workshops or similar events (travel and other expenses; work time) during the project period. The budget framework should also cover costs for working time for participation in up to three VREF online events (presentations/discussions of projects, approx. 2-3 working days).

The VREF grant is intended to support the project fully or partly, depending on the total volume of the project and the possibilities for co-funding. The VREF thus welcomes additional funding to projects from other sources (co-funding).

The projects supported under this Call are expected to start in early 2024 and be finalized within 12 consecutive months from the starting date.

5. VREF's review and decision-making process - timeframe

All qualifying applications will be reviewed both by international reviewers and the VREF Scientific Council in October–November 2023. The VREF Board will make a formal decision on project grants in December 2023. VREF will inform all applicants on the outcome of the process **before 15 December 2023**.

An application for a project grant must be submitted by e-mail to secretariat@vref.se and received no later than **15 September 2023**.

VREF will confirm receipt of each application by e-mail to the main applicant.

Please see the next section "Application guidelines and instructions" for detailed instructions for how to apply. Applicants are welcome to contact VREF by e-mail: secretariat@vref.se for further information or for clarification regarding the requirements for applications.

To ensure maximum transparency in the recruitment process, all questions and VREF's answers to them will be published in a Q&A page on the VREF web site.

6. Application guidelines and instructions

All applications for research funding within this Call must:

- be structured and delineated in accordance with the guidelines stated below;
- be written in English;

- be delivered according to the following technical specifications:
 - consist of a maximum of 10 single pages, excluding short CVs for key researchers in the project
 - be saved in PDF file format (of ready-to-print quality)
 - be laid out in European A4 paper format, with a minimum font size of 12 pt and margins of at least 25 mm;

Applications exceeding the specified maximum number of pages will be rejected. Detailed instructions on the content and format of the application are provided below.

6.1 Information to be given on the Front page

(NB that the front page and appendixes are not included in the 10 pages' limit)

Project title

- The title should be concise and informative, preferably including keywords characterising the content and direction of the project.
- **Name and contact details of main applicant**
The main applicant (project leader) must be an individual, not an organization. Please note that only one person shall be the main applicant. State name, title and function, affiliation and all contact information.
- **Names and addresses of project team members**
List the names and affiliations of all project team members, plus contact information.
- **Executive Summary (max 300 words)**
The summary should consist of a brief outline of the problem, the objective(s) and general approach of the project, indicating the factors that give an added value of the project to existing work in the field.

6.2 Structure of the Application

The application should be structured around the following elements:

- **Background and motivation to the project (including theoretical framework and state-of-the-art research that informs the work)**
Provide a clear statement of the problem to be addressed, as well as the background, context and challenges of the issues to be addressed in the project.
- **Objectives**
Identify the research question(s) to be addressed, as well as the main objective(s) that will be achieved over the duration of the project.
- **Project Design/methodology**
Describe the overall project design, methodology, working methods and detailed program of work. This section should also include descriptions of the main activities, foreseen deliverables and a time schedule.
- **Project participants and organization**
The application should give information on how the project will be organized, who will be responsible for different parts of the work, how these parts will be interlinked, and how the project will be managed and coordinated. The VREF accepts that there may be

further considerations and recruiting of staff for the project after the funding decision by VREF; however, all key participants in the project must be identified in the application.

- **Expected outcomes, deliverables and outreach including contributions to new knowledge**

Describe briefly the expected research results, outcomes and possible impact on research, education, policy and/or practice in the project area. This section may also include identifying new research issues and methodological approaches that should be further explored, as well as discussing possible future engagements with various stakeholders in exploring these issues.

- **Budget**

The application should include a detailed budget for the project, including distribution of costs (e.g. salaries, overhead, other costs (such as travel, specific equipment, material, Open Access costs, etc) among participating researchers/universities and others.

- NB all overheads, VAT and similar costs must be included in the budget. Please indicate in the budget if the project will be partly funded (co-funded) by other sources than VREF.
- VREF advises applicants to present the project budget according to the template below:

Please state the below funding and costs in SEK (1 SEK = approx. 0,10 USD or 0,09 Euros)				
Total Project cost				
Requested VREF funding				
Other expected project funding (if any)				
Distribution of project costs	Host Institution	Partner A	Partner B	Partner C, etc.
Distribution of total project costs between the project partners				
Staff costs				
Other project costs				
University/Research institute overheads				

Appendices

In addition to the application's main document (max 10 pages), the following three appendices should be added:

++ Bibliography/References

++ Short CVs (maximum 3 pages) for core researchers in the project, including maximum 10 references

Appendix 1 – Research Topics of this Call – Core themes

The Walking program encompasses four core themes that have strong relevance for understanding various dimensions of walking as a mode of transport, see table 1 below.

Table 1. Overview of Walking Program's Core Themes

CORE THEME 1 Conceptualizing and critically appraising walking as a mode of transport
CORE THEME 2 Walking as transport in everyday urban life; equity issues
CORE THEME 3 Governance, policy and urban planning for walking as a mode of transport
CORE THEME 4 Services, tools and business models to facilitate walking as a mode of transport

Theme 1: Conceptualizing and critically appraising walking as a mode of transport

In the most fundamental sense, walking is a way of moving around and reaching destinations – both indoors and outdoors – for most people regardless of age. From this point of view, it might seem superfluous to discuss the definition of the term “transport mode” when it comes to walking. However, the term can be said to have theoretical, methodological and planning-wise connotations and implications (cf. Lindelöw, 2016).

Acknowledging the role of walking as a transport mode is not a new perspective. Various discussions of this subject have previously emerged in research and planning, often using typologies such as destination walking, utility walking, purposive walking, and transport walking. These typologies have sometimes been contrasted with “strolling walking” or discursive walking, where the journey “itself” is deemed more important than reaching a particular spatial destination. However, while these categorizations and typologies appear as almost mutually exclusive, in many cases they instead describe different aspects of the same walking trip (e.g. a walk to a daycare facility through a park) or simply reflect different fields of research (e.g. transport studies, mobilities, anthropology).

At the same time, it is clear that one kind of walk or trip might be described using several typologies, such as destination and “strolling walking”, where destination walking is not essentially different from “strolling walking”. Moreover, it can be argued that these categorizations are too blunt and simplistic to allow for more nuanced conceptualization of what walking for transport infers or entails. Thus walking as a mode of transport does not denote a particular kind of trip or walking behaviour, rather it constitutes a conceptual approach to walking overall.

Recent work in this area (Kärrholm et al. 2017; Martínez, 2021; Middleton 2009, 2010, 2011) are examples of conceptualization attempts that are relevant to the kind of the research that could be carried on in this thematic area. Such research implies a step away from research

driven by current trends and policy proposals or by specific needs and wants on the part of specific groups. Work in this area instead implies more holistic research approaches that treat pedestrians as subjects in themselves rather than as “means to an end”. Examples of issues that could be addressed in this thematic area are:

- How can walking as a mode of transport be conceptualized and operationalized, and what would be the implications of such conceptualizations for research and planning?
- What subjects, theories and perspectives can provide valuable contributions to understanding, developing and critically appraising the concept? Related to this, how can conceptualizations of the role of walking in “non-transport” studies inform and develop research more generally?
- How might perspectives from planning and design contribute to utilizing and implementing new (theoretical) approaches to walking as a mode of transport – beyond e.g. walkability, streetscape design and space syntax?

Theme 2: Walking as transport in everyday urban life; equity issues

While traditional research approaches have admittedly acknowledged the role of walking in linking destinations and activities, most research has not fully addressed what treating walking as a mode of transport implies from a more holistic perspective. As Monnet suggests in Sagaris et. al. (2022), walking is a “total social phenomenon”, by which is meant that walking is an ubiquitous part of everyday social life. Such a perspective seeks to understand and examine both the role of walking in urban everyday life, as well as various users’ behaviors, choices and preferences regarding how to reach destinations, activities and opportunities. Overall, there is currently a lack of in-depth studies of actual walking/mobility practices and the problems and needs among heterogeneous groups: their everyday patterns of getting about on foot, their needs and preferences, their experiences and challenges in gaining access to various modes of travel, and the implications of such barriers for their daily lives.

There is also a need to examine the role of walking in everyday urban life from a systems perspective, i.e. examining the role of walking for a functioning urban economy, effective public transport, or urban social life. Research and policy efforts are currently largely directed at promoting and understanding modal shifts (e.g. Brand et. al., 2021) – often to walking, cycling or public transport – as well as barriers for making such shifts. However, from a perspective of this theme, there is also a need for empirical investigations and assessments of walking trips already taking place, as well as how such behavior can be maintained and fostered. This type of work includes assessing the benefits (e.g. regarding congestion reduction and climate mitigation) both for walking trips already taking place and for increases in the number of walking trips.

In many urban areas, walking is already an established way of mobility and travel – be it by choice or not: many walking trips (particularly in the Global South) are made by so called “captive pedestrians” who lack alternatives or financial means to travel differently. In order to support or influence current walking behavior, we need to better understand and decipher the fine-grained web of movements, interactions and choices that constitutes the walking patterns of diverse groups in various urban contexts today. Linked to this, we also need to

contextualize patterns of walking in various urban areas so as to better understand the importance of different urban conditions and circumstances in which walking takes place. Also, since walking often consists of a series of intermediate trips (or parts of trips) in complex travel chains or activity patterns, it would be useful to develop new methods and data sources – beyond travel surveys and trip-based data – that could capture such nuances. In this context, intra-urban comparisons of walking behavior, practices and patterns could be fruitfully carried out through South-North or South-South comparative work.

Finally, understanding walking as an everyday mode of travel also entails dealing with issues related to equity, accessibility and safety for vulnerable groups of pedestrians in particular. Here it is important to analyze the intertwining socio-demographics, activity patterns and urban constraints that may restrict access to viable and safe walking infrastructure. Particularly in the Global South, unsafe, polluted and crowded streets – combined with various institutional constraints on authority – often restrict access to destinations such as workplaces, schools, and healthcare facilities. In this context, methods that focus on assessing equity among and within various groups could be fruitful.

Examples of issues that could be examined within this theme include:

- What role does walking play in everyday life for different user groups in various urban areas? In other words, how do different user groups and citizens walk to “get about” in their everyday activities, and how do they perceive walking in relation to their everyday life and mobility?
- How can we better understand the needs, preferences, problems and access to mobility options of different groups, particularly vulnerable pedestrians such as (some) women, children, the elderly, and groups with weak socioeconomic resources?
- What is the importance of different urban conditions and circumstances (e.g. related to the configuration of transport systems, the functioning of cities and their economic and social life) in shaping or restricting walking in everyday life? How would the quality of cities and their transport systems devolve if conditions for walking were to worsen? How would they benefit if conditions improved?

Theme 3: Governance, policy and urban planning for walking as a mode of transport

Despite increasing recognition of the importance of walking for achieving societal goals such as sustainable urban transport, walking remains largely invisible in planning, policy and investment plans both nationally and locally in many areas. There are several factors that contribute to this situation.

Among else, dominant planning paradigms based on e.g. “predict and provide”, “travel-time reduction” or “transit-oriented development” tend to overlook walking (Sagaris et. al., 2022), and in many areas planners lack evidence-based tools that are needed to support policy initiatives for walking (Tight, 2022). Little knowledge exists about the effectiveness of various measures, which is compounded by problems of transferability and the need for policies that are suitable to the specific circumstances of a place and time (Tight, 2022). Finally, there is

also a strong need for research on new approaches based on broad, inclusive collaborative planning processes that meet the needs of broad groups, reflect equitable distribution of interventions (ibid.) and prioritize walking as an important social and cultural phenomenon.

Further, as discussed earlier, walking risks being “no one’s responsibility” – it is (in theory) an option available for almost everyone and it has no particular industry or financial interest backing it. This situation risks resulting in walking receiving too little attention or interest from political organizations, societal groups, or NGOs. However, the landscape of relevant stakeholders for walking, including their interests and motivations (or lack thereof), is a topic deserving further attention and scrutiny.

It has also been pointed out (Allen, 2021) that even when walking is explicitly mentioned as “important” in planning documents, there remain significant barriers to actual implementation of measures and strategies (such as dedicated plans and tools for walking) that could contribute to developing adequate pedestrian infrastructure in urban areas, particularly in the Global South. Plans and strategies for “sustainable” or “active” mobility might often prioritize cycling or public transport before walking. Further, policies and strategies on a national level might be poorly fit for dealing with aspects relevant to walking, while local plans and strategies might not mirror or resonate with strategies, goals or metrics on the (inter-) national level. Here it is important to identify and understand the interdependencies and interactions (or lack thereof) between priorities, planning processes and policies on different levels of governance, sometimes referred to as multi-level governance. Existing institutional structures may limit actors’ ability to allocate resources for walking; it is also clear that governance is embedded in power relations that can influence planning and decision-making processes. At the same time, there is currently little research on dynamics, paradigms and processes that shape transport planning and politics for walking specifically. Findings and “lessons learned” from other transport modes cannot automatically be translated to walking.

Examples of issues that could be examined within this theme include:

- What dimensions, stakeholders or barriers have significance for the institutional capacity of urban planners to develop and implement policy measures to explicitly promote walking in urban spaces? What groups of stakeholders (e.g. public, private, NGOs) are influential in shaping decisions and outcomes regarding policies for walking? What are their respective goals and interests?
- What is the status of walking in urban planning and decision-making processes in specific urban areas, e.g. to what extent are guidelines and methods for walking planning actually applied and why/not why in specific contexts? To what extent is planning for walking integrated and coordinated with other policy areas, e.g. planning for public transport or public health? How are policies and strategies at different scales coordinated (or not)? What are the potential prospects and pitfalls of coordinated multi-level governance when it comes to improving conditions for walking as a mode of transport?
- How might new approaches, standards, and tools for urban planning and governance of walking be further developed in ways that are based on both broad, collaborative planning

and equity considerations?

Theme 4: Services, tools and business models to facilitate walking as a mode of transport

The current revolution in “big data” holds many promises and opportunities, not least for the mobility and transportation industry. The evolution and use of autonomous vehicles, automated mobility options (“travel on demand”), shared bicycles and electric scooters are all dependent on collecting and using trip data. However, in these developments, walking has so far been largely neglected or merely been given a passive role. For example, the concept of mobility as a service (Maas) seemingly assumes a “vehicles-only” approach in which walking is regarded merely as a feeder mode to delivery modes and shared mobility options. Overall, walking remains somewhat viewed as a natural, manual and non-technological means of travel.

There are significant reasons, however, to question this view and its apparent divide between on the one hand, new mobility services and on the other hand, walking as a mode of travel that links such services. In urban areas today, residents use their mobile phones or gadgets extensively while getting about on foot – which not only influences their use of, and views on, travel time and the possibility of performing simultaneous activities and reschedule future ones, but also provides support for wayfinding and discovering nearby amenities and activities. From a research and policy perspective, this combination of technology and the “mobile individual” can be seen from two perspectives: the array of possibilities for what the activity of walking could entail expands, and pedestrians themselves become producers of data for tech companies to collect, analyze and make use of in their business and serve operations.

In this context, the concept of “walking as a service” (Lyons, 2020) suggests a way forward and is well worth exploring further. From an individual perspective, a pedestrian with a mobile phone can be seen as a mobility-technology assemblage (Holton, 2019), almost constituting a mode of travel in its own right. The combination and abundance of big data, and the use of technological gadgets and attires, could be fruitfully applied to facilitate walking as a part of integrated approaches to urban mobility.

While support to technological development per se will not be included in the current VREF program, there are a number of related research issues that could fruitfully be explored in this theme:

- How can (mobile) technology help increase pedestrians’ wayfinding capability and knowledge and perception of their walking environment? How can such technology develop and expand our understanding of walkability and pedestrian-friendly planning?
- How can active and passive data and its sources be further utilized to develop services, tools and business models that support and foster walking as a mode of transport?
- What are the risks of such initiatives from a pedestrian’s planning perspective, as related to e.g. vulnerability, risks of relying on/trusting automated planning tools, and high demands on user knowledge of various systems?

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