



Direction for K2 from 2025

Local, regional and interregional travel is crucial for sustainable social development. In order for public mobility to form the basis for accessibility in and between sustainable cities and regions, new knowledge is required that is translated into improvements and renewal. The investment in K2 from 2025 aims to support such a development through a unified knowledge environment for public mobility – in research, close to practice. Behind the initiative are Region Stockholm, Region Västra Götaland, Region Skåne, the Swedish Transport Administration, VTI, Malmö University and Lund University. The initiative is also supported by Vinnova. In total, K2 is financed with approximately SEK 25 million per year.

This document describes the direction for K2 from 2025. The orientation plan has been developed during the autumn of 2023 and spring of 2024 by K2's management team with the support of additional researchers linked to K2 and by an external consultant. K2's international advisors have on several occasions submitted comments. On 3-4 April, a workshop was held where ideas for orientation were discussed with more than 50 participants, of which about 20 people represented the metropolitan regions, the Swedish Transport Administration, SKR, Swedish Public Transport and Vinnova. Researchers from Lund University, Malmö University, VTI, KTH, Chalmers, Örebro University and Linköping University also participated.

The orientation plan is based on the partner agreement, which states that K2 shall:

- 1) take global sustainability goals, national transport policy goals and regional development goals as a starting point,
- 2) have a broader perspective by moving from public transport to public mobility;
- 3) be an independent actor close to the industry, capable of developing, summarising and making available knowledge of great relevance,
- 4) create added value by a) providing a platform for collaboration between researchers and between research and practice, b) initiating and conducting research based on a broadly based research focus, and c) contributing to learning and skills development among actors in and around public mobility, and
- 5) be organised in a so-called partner-based hosting model where researchers can participate regardless of organisational affiliation.

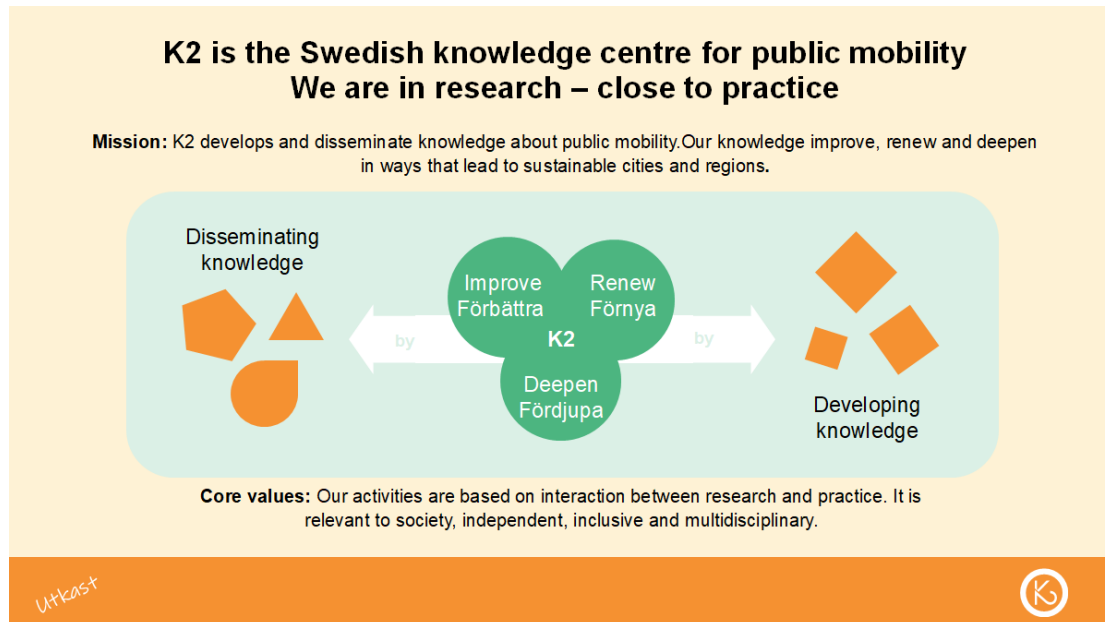


Figure 1: Summary image of the orientation plan.



Mission, core values and goals

Mission

K2 develops and disseminates knowledge about public mobility. Our knowledge improves, renews and deepens in ways that contribute to sustainable development in cities and regions.

The mission emphasises the purpose of knowledge and K2's role as a knowledge producer and knowledge disseminator. It emphasises a new and broader perspective by highlighting public mobility, which includes a system of more types of shared transport, but with public transport as the backbone. The purpose of the concept of public mobility is to liberate new ways of looking at and thinking about what public transport is and can be. By keeping the concept open, the new and the unexpected are stimulated.

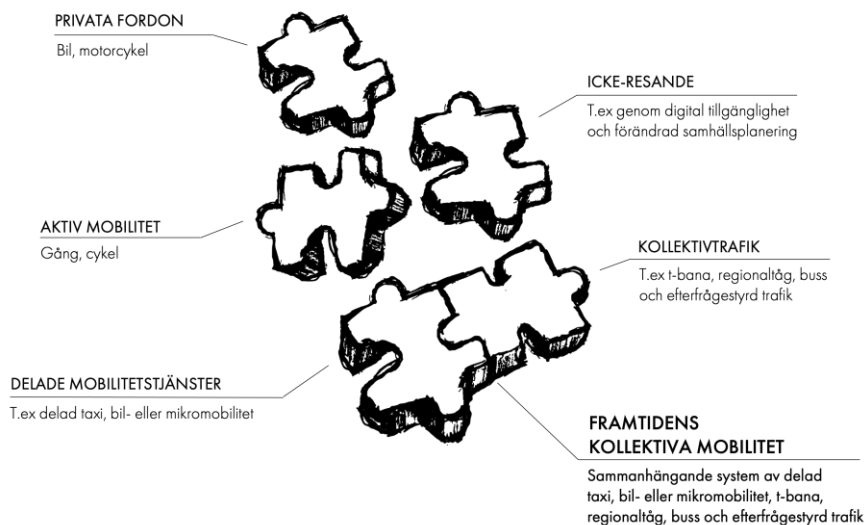


Figure 2: Public mobility as illustrated in the K2 initiative Rådslaget



Core values

The business is permeated by six core values:

- **Independence** – Our business is founded on academic freedom. It is not controlled by special interests.¹
- **Collaborative** – We work in a close and trust-building relationship between research and practice.
- **Socially relevant** – We address current issues and take place in the public debate.
- **Research-based** – We develop and translate knowledge on a scientific basis and based on high scientific quality.
- **Inclusive** – We welcome researchers from different organisations and disciplines, with different theoretical perspectives and methods.
- **Internationally connected** – We participate in international collaborations and knowledge exchanges as a method to achieve better understanding and developed working methods.

Goals

In addition to more traditional goals and measures in academia (e.g. publications), there is an emphasis on ensuring that the knowledge is applied. The goals will be further developed for increased measurability.

Goal 1: K2's contribution to international research on public mobility shall gradually increase.

Goal 2: K2's contribution to policy development that can contribute to global sustainability goals, as well as national and regional goals, shall gradually increase.

Goal 3: K2's contribution to the renewal of public mobility that contributes to sustainable development shall gradually increase.

Goal 4: K2's contribution to critical reflection through public/internal debate shall gradually increase.

Goal 5: Awareness of K2's activities and the number of people who take part in the knowledge that K2 makes available shall gradually increase.

¹ K2 ansluter sig till den definition av akademisk frihet som uttrycks i "Bonn Declaration on Freedom of Scientific Research". https://www.bmbf.de/SharedDocs/Downloads/files/_drp-efr-bonner_erklaerung_en_with_signatures_maerz_2021.pdf?__blob=publicationFile&v=2



The K2 environment

The environment that is built around K2 aims to support dynamism, create a sense of belonging, a sense of stability and a platform for joint exchange and learning among K2's researchers and practitioners who participate in K2's activities. It provides a context for the exchange of experience and method development as a complement to the research environment that exists at the university or research institute at which the researcher is employed. The environment contains a mix of different scientific subjects and perspectives, which promotes multidisciplinary development within the framework of K2.

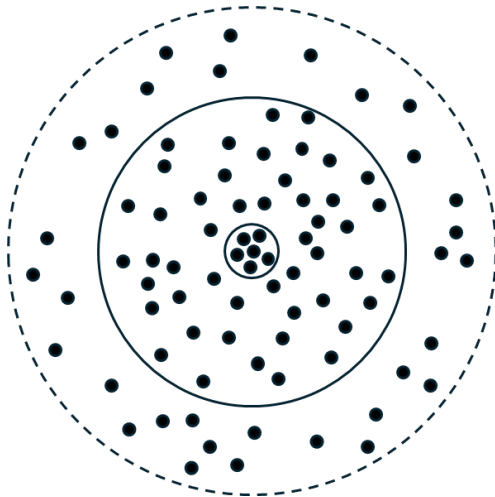


Figure 3: Different layers in the K2 environment. Inner: coordination function (office). Middle: K2 researcher. External: people from e.g. partner organisations that regularly

collaborate within the framework of K2

The K2 environment consists of several layers. It is held together by a coordinating function consisting of the director, research leader, communicator, etc. Around this is an environment of researchers who have applied for and been granted status as K2 researchers. The researcher needs to meet the following basic criteria to obtain and maintain status as a K2 researcher:

- be an active researcher active at an established research organisation in Sweden,
- conduct research of relevance to public mobility as a basis for sustainable cities and regions;
- actively participate in and contribute to K2's research environment,
- state K2 as an affiliation when publishing results and presenting ongoing research in the field.



Projects within K2 are mainly carried out by K2 researchers. In addition to the opportunity to conduct projects, active participation means that the researcher contributes to one or more of the activities that take place within the environment. For example, it can be about:

- contribute to the development of research initiatives together with other K2 researchers
- contribute to policy proposals or public debate
- present research results at knowledge lunches
- arrange and participate in research seminars
- lecture at K2's courses
- Organise workshops with practitioners
- contribute to international exchanges
- Collaborate with industry players

K2 researchers report their involvement within the centre annually through a simple form. In this way, the coordinating function receives ongoing information about new publications and activities carried out by researchers linked to K2.

Around the coordinating function and the group of K2 researchers there is a larger community that includes people in K2's partner organisations and other organisations that regularly participate in K2's activities. These people contribute insights and suggestions from their respective organisations and roles. At the same time, they take part in the research results and proposals for changed policy that K2's activities result in.



Research perspective

Local, regional and interregional travel is crucial for sustainable social development. In order for public mobility to form the basis for accessibility in and between sustainable cities and regions, new knowledge is required that provides a greater understanding of both travellers' needs and conditions, as well as society's challenges and opportunities to provide efficient and sustainable solutions.

The orientation plan is based on a strategy that is based on three different perspectives with the knowledge that is developed and translated within K2. One perspective is to *improve*. The knowledge will contribute to developing what we already have by investigating and suggesting improvements within the framework of today's public mobility systems. Another perspective is to *renew*. The knowledge will contribute to renewal by exploring opportunities, perspectives and positions beyond the present in ways that can change the system boundaries for public mobility. Another perspective is to *deepen*. The knowledge should contribute to critical reflection and questioning in ways that raise new questions and create discussion about the fundamental values and norms that characterise public mobility and its role in society.

Improve

In *improve*, the emphasis is on how already established systems and processes can be improved in order to contribute to a more sustainable transition and development. Traditional public transport is in focus, along with other established forms of public mobility. There are many different areas where today's public transport can be improved – by road, on tracks and on water.

Examples of themes within *improve*:

- **Effects of changes in the route network.** This refers to both public transport's "hardware" – vehicles and infrastructure – as well as "software" in the form of, for example, routes, service offerings, pricing and conditions for switching between lines or to and from other modes of transport. A central question within this theme is about the possibilities and effects of increased accessibility for bus traffic, including the areas of conflict this creates in relation to walking and cycling.
- **Increased reliability of public transport.** The theme includes, for example, increased knowledge about factors that affect punctuality and capacity in train traffic, as well as how fewer delays and better regularity in bus and tram



traffic can be achieved. This may also include research on better methods for measuring and predicting reliability and to be able to include reliability to a greater extent in decision support for the design of public transport and infrastructure.

- **Procurement.** The research within this theme is about how procurement can be improved by becoming more efficient, more flexible and more coordinated in order to reduce costs and increase sustainability. Topics that can be studied in more detail include, for example, the choice of contract model (net, gross or various forms of incentive contracts) and evaluation methods (lowest price or various forms of price/quality weighting).
- **Cooperation.** Improving public mobility and creating functioning door-to-door travel chains requires collaboration between different actors. The theme can, for example, include issues related to integrated transport and urban planning, collaboration for combined services, ticketing collaborations and communication between strategic, tactical and operational levels.
- **Adaptation to different groups.** The theme addresses issues of accessibility for everyone in public transport. It can also be about different customer segments and how to meet different needs at different phases of life.

As a transition to the area of *renew*, there are also research questions concerning the future of traditional public transport. This includes questions about the robustness and resilience of the public transport system in a changed world. The theme can also include research on how increased access to data (open data) and AI can be used to improve the public transport system and also facilitate better goal follow-up.

Renew

A future-oriented perspective runs through the *renew* area. The area aims to contribute to renewal by exploring opportunities, perspectives and positions beyond the current situation in ways that can shift system boundaries and change traditional patterns within public mobility, in order to contribute to a sustainable transition and development.

Renewal can contribute to sustainable transition in many different ways and includes both new ways of looking at things and concrete innovations. Within the *renew* area, system boundaries will be challenged in relation to new technology and forces of change. The area takes a broad approach to innovation, i.e. products, services and processes that concern a sustainable transition and transport efficiency from a system and life cycle perspective with public mobility in focus. organisational roles and



institutional changes that support (or hinder) renewal are included in the area. The focus is on predicting the effects of change forces, but also creating knowledge so that organisations and society at large can make informed choices, including developing policies and making decisions (based on goals such as sustainable travel).

Examples of themes within *renew*:

- **New and renewed technologies and services enable and challenge.** (How) can new technology contribute to increased sustainable accessibility? Another central question is how AI and how its entry can affect mobility and be applied in analytics. In particular, the impact of autonomous vehicles on mobility is an important aspect. Opportunities and effects with shared data from different actors are also relevant. Issues related to the investigation of potential effects and opportunities of innovations are taken into account.
- **Legitimisation and acceptance** of new technology in the transformation are also central to the area.
Social aspects and the user perspective in the introduction of new technology are included, as well as aspects related to new services such as MaaS, on-demand public transport, and personal assistants.
- **Transformative system change.** A transport efficiency perspective is included in this theme. Issues relating to new ways of co-transporting goods and people, new starting points, new approaches with a focus on reducing passenger kilometres and CO2 equivalents per passenger kilometre may be key aspects.
- **Roles and organisation.** Public mobility may require new structures for integrated planning related to the land use and transport system. This can pose challenges for regulations, legislation and regulations. Organisational boundaries may be shifted and new business models may be needed. New legislation may be required to address different mobility needs/demands.
- **Crises as a force for change.** Perspectives that are based on resilience, robustness and preparedness can be emphasised to a greater extent in the future. A changed security situation and climate change may require an increased focus on resilience (or robustness) in the transport system, including in relation to new technology. Crises in themselves have been found to lead to renewal. Crises can sometimes be seen as opportunities.

Deepen



Research in the field of *deepening* strives to problematise established practices and dominant views, both in the research world and in practice. The aim is to raise new questions and promote discussion about the fundamental values and norms that govern public mobility and its function in society for different groups through critical reflection and questioning of current goals, ways of thinking, routines and structures. By challenging common truths, practices and concepts that affect the development of the public mobility of the future, research in this focus area contributes to K2's mission to generate knowledge that promotes a sustainable transformation of both cities and regions.

Examples of themes within *deepen*:

- **Consequences of prevailing practices for different groups.** This may apply to research that focuses on the consequences for different user groups (children, the elderly, people with disabilities), research on differences in needs and access to services between urban and rural areas, as well as economic consequences/related to access for different socio-economic groups and for different groups. Central to this is the conditions for fair access to transport.
- **Goal conflicts in planning and decision-making.** For example, regarding trade-offs between democratic participation and efficiency, between different groups, between urban and rural, between risk-taking and long-term stability, or different priorities related to land use, planning or accessibility.
- **The organisation of work and working methods.** For example, regarding working conditions for different groups of employees, new forms of gig and platform-based work in the mobility sector, but also more general issues regarding the organisation of work such as local perceptions of roles, skills supply, and the role of different actors (consultants, researchers, civil society organisations).
- **Process issues concerning equitable inclusion** in planning and decision-making processes about the transport system, as well as issues concerning how responsibilities and mandates are distributed between different political levels and organisations. Other important process issues concern the relationship between politicians and civil servants, transparency in decision-making processes and issues concerning the need to ensure public values in, for example, innovation processes.



- **Knowledge base and its impact in practice.** For example, what type of expert knowledge becomes normative and which perspectives are (not) given prominence. This also includes questions regarding the knowledge generated in pilots and projects and the knowledge that the profession within the organisation possesses. A related question concerns knowledge about different groups' travel habits and travel patterns from a power perspective.



Comparison K2 2013-2024 and from 2025

	K2 2013-2024	K2 from 2025-
Name	K2, National Knowledge Centre for Public Transport	K2, National Knowledge Centre for Public Mobility
Partnership	Six parties: Lund University, Malmö University, VTI, Region Stockholm, Region Västra Götaland, Region Skåne	Seven parties: Lund University, Malmö University, VTI, Region Stockholm, Region Västra Götaland, Region Skåne, the Swedish Transport Administration.
Financing	The parties as described above, as well as government funding from the Swedish Transport Administration, Vinnova and Formas. 1/3 funding from each academy, region, state. A total of SEK 27 million, of which SEK 2 million is inkind.	The parties as set out above and funding from Vinnova. The funding consists of SEK 4.5 million each from Vinnova and the Swedish Transport Administration, SEK 3 million per region, and SEK 6.5 million from academia. The Academy's co-funding is linked to projects to a greater extent. A total of SEK 24.5 million, of which SEK 4.5 million is inkind.
Legal grund	No legal personality. Organised as a simple company with six partners (the parties). Own financial reporting.	Lund University is the centre's legal personality. Formally organised as a department within LTH. No company.
Board	Composed of parties	Composed of parties
Director	Full-time, employed at LU/MAU/VTI	Full-time, employed at LU
Vision	K2 is a leading knowledge centre that, through research and education, improves and renews public transport as a means of sustainable cities and regions	K2 develops and disseminates knowledge about public mobility. Our knowledge improves, renews and deepens in ways that contribute to sustainable development in cities and regions
Mission statement	We 1) research and develop new and applicable knowledge about public transport and its role in society, 2) disseminate knowledge and offer education about public transport based on scientific knowledge, and proven experience, and 3) contributes to innovation and renewal in collaboration with public transport actors,	We create added value by 1) initiating and conducting research based on a broadly anchored and dynamic research focus, 2) providing a platform for renewal through collaboration between researchers and between research and practice, and 3) contribute to learning and skills development among actors in and around public mobility.



Goals	<ol style="list-style-type: none"> 1. Carry out research projects and publish in scientific journals and reports, as well as at international and national conferences, 2. Make scientifically based knowledge available in ways that make it interesting and relevant to actors active in and around public transport, 3. Carry out training on public transport for professionals, and contribute to strengthening public transport as an area of knowledge in education at universities and colleges 4. Strengthening renewal and innovation through collaboration between research and practice 5. Those who work to develop public transport in Sweden believe that K2 contributes to increased knowledge about public transport as a means for sustainable cities and Regions. 	<ol style="list-style-type: none"> 1. K2's contribution to international research on public mobility will gradually increase. 2. K2's contribution to policy development that can contribute to global sustainability goals, as well as national and regional goals, will gradually increase. 3. K2's contribution to the renewal of public mobility that contributes to sustainable development will gradually increase. 4. K2's contribution to critical reflection through public/internal debate will gradually increase. Measure: Impact for public/internal debates as a result of K2's knowledge. 5. Awareness of K2's activities and the number of people who take part in the knowledge that K2 makes available will gradually increase
Research agenda /focus	<p>Five research areas: 1) future mobility, 2) market and financing, 3) decisions and effects, 4) integrated urban planning, and 5) public transport for all, three perspectives (individuals and groups, organisation and collaboration, transport systems and information) and about 20 more concrete issues within these.</p>	<p>Three research perspectives that are based on the purpose of the knowledge. Improve, innovate, deepen.</p> <p>The perspectives are dynamically specified within the framework of the research process, especially in connection with major strategic projects.</p>
Research process	<p>Smaller K2 projects twice a year. Internal assessment process. Larger K2 projects every two or three years. Mainly bottom-up. External and internal assessment process.</p>	<p>Partly new process based on four tracks. 1) smaller projects with no particular focus, 2) larger strategic projects with a focus that are developed in dialogue, 3) tactical projects that the management team can initiate, 4) externally funded projects.</p> <p>Increased focus on external assessment for both larger strategic projects and smaller projects.</p>
Employees	<p>1) Persons who are part of K2's office, and 2) researchers who participate in any of K2's projects, mainly from LU, MAU and VTI.</p>	<p>1) Persons who are part of K2's office, and 2) researchers who have actively applied to be affiliated K2 researchers, regardless of research organisational residence.</p>



Communication	Focus on knowledge produced within K2. Inside-out.	More focus on meeting the knowledge needs of the target groups by conveying both own and external knowledge.
----------------------	--	--