

Foundational Livability in Austria: Insights from the Re:sl:Ze Project and a Research Agenda on Income, Infrastructure and Time

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Foundational economy scholarship has developed a rich conceptual account of the goods, services and infrastructures required to sustain everyday life. Yet the empirical measurement of foundational livability remains comparatively underdeveloped, particularly where monetary resources, spatial accessibility and time use intersect. This paper addresses that gap through the Austrian Re:sl:Ze project, which combines three complementary dimensions: residual income, social infrastructure and time use. Drawing on the Austrian Household Budget Survey 2019/20, a municipality-level social infrastructure dataset and the Austrian Time Use Survey 2021/22, the project examines what existing data can reveal about foundational livability and where important research gaps remain. The descriptive findings show that necessary expenditure substantially reduces the effective financial resources of low-income, tenant, single-person and single-parent households. They also reveal marked territorial differences in access to childcare, education, health, care and social services, with particularly weak provision in smaller municipalities and when accessibility by public transport is considered. Time-use patterns further demonstrate persistent gender inequalities in unpaid work, which are especially pronounced in households with children and in municipalities with poorer infrastructure provision. Taken together, the three pillars show that foundational livability cannot be captured through income or regional averages alone. The available datasets, however, do not permit direct causal analysis of how changes in provision affect household expenditure, time burdens or ecological pressures. The paper, therefore, presents Re:sl:Ze as both an empirical proof of concept and a research agenda for developing more integrated, longitudinal and spatially sensitive measures of foundational livability.

1 Introduction

Everyday wellbeing is generated through systems of provision rather than through private income alone. Still, inequality is generally measured through income and wealth. These indicators remain fundamental, but they provide an incomplete picture of households' material conditions and their capacity to participate in everyday social life. Households with similar disposable incomes may face very different living conditions depending on their housing and energy costs, access to healthcare, education, childcare, eldercare and public transport,

and the amount of time required to organize everyday needs. As the Re:sl:Ze project argues, income does not tell the whole story. Households' livability is also shaped by necessary expenditure, the availability and accessibility of social infrastructure, and the unequal distribution of time between paid work, unpaid care and other responsibilities.

These dimensions are closely connected. The concept of foundational livability thereby highlights also the spatial component by focusing on the capacity of an area to provide households with the essential services they require to satisfy their needs (Calafati et al., 2023). High rents or energy costs reduce the income available for other purposes. Poorly accessible services require longer journeys and may limit the time available for paid work, education, rest or social participation. Where childcare, care services,

transport or other basic infrastructures are unavailable, unaffordable or difficult to access, households must find alternative ways to meet the underlying needs. They may purchase private services, rely on private cars, reorganize paid employment, reduce consumption elsewhere or provide services themselves through unpaid labor. The withdrawal, inadequacy or marketisation of collective provision therefore does not necessarily eliminate costs. Rather, costs may be transferred from public budgets and collectively organized systems to households. This transfer may take several forms: higher monetary expenditure, additional travel and organizational time, intensified unpaid work, or greater dependence on environmentally intensive private alternatives. The consequences may also differ within households. In particular, additional care and organizational responsibilities may be absorbed disproportionately by women.

Against this background, the paper is guided by the following question:

How can foundational livability be empirically assessed through residual income, social infrastructure and time use, and what limitations and research needs emerge from the Austrian case?

The starting point is the Re:sl:Ze project¹. The project was designed to broaden the analysis of livability in Austria by examining three dimensions of inequality jointly: the income remaining after necessary expenditure (i.e., residual income), the availability and accessibility of social infrastructure, and the distribution of time within households. It thus represents an initial attempt to make the relationships between monetary resources, collectively provided services and household labor empirically visible. The purpose is not to provide a definitive empirical answer to this question. The available datasets do not permit a comprehensive causal analysis of how changes in particular services are translated into household expenditure, time use and socio-ecological impacts. Instead, the paper develops a research agenda for studying these relations and takes stock of what can already be observed with existing Austrian data.

The significance of Re:sl:Ze lies in bringing an empirically grounded perspective to a field that has so far developed primarily through conceptual, theoretical and policy-oriented work. Foundational economy research has produced a rich vocabulary for rethinking economic development around everyday needs, collective provision, social citizenship and livability rather than productivity and competitiveness alone (Barbera & Jones, 2020; Foundational Economy Collective, 2018; Russell et al., 2022). More recent contributions have extended this

perspective to social reproduction, ecological limits, spatial accessibility, political discontent and the unequal distribution of time (Bärnthaler et al., 2021; Bassens et al., 2025; Hansen, 2022). Yet the empirical operationalization of these ideas remains less advanced. In particular, there are still relatively few attempts to examine monetary resources, infrastructure provision and time use within a common analytical framework.

This matters because the central claims of foundational economy scholarship concern relationships that cannot be observed through conventional income or regional-growth indicators alone. The quality of everyday life depends not only on how much households earn, but also on the costs they cannot avoid, the services they can access, the distances they must travel and the unpaid labor required to meet needs that are not collectively provided. Bassens et al. (2025), for example, argue that foundational livability emerges at the intersection of household characteristics, income and the spatial organization of systems of provision. They call for a more fine-grained analysis of inter- and intra-household differences generated through the interaction of income, time and space. Bärnthaler et al. (2021) similarly argue that residual-income measures must be complemented by time-use data because household-level monetary indicators can conceal the unequal distribution of unpaid work.

The approach and findings of Re:sl:Ze make this debate empirically tangible in the Austrian context. Rather than beginning with sectors or employment classifications, the project starts from households and asks how three dimensions of everyday life, residual income, social infrastructure and time use, shape the experience of inequality. This shift in perspective is important. It moves the analysis from the question of how much income a household receives to the question of what resources remain after essential needs have been met, from the formal existence of public services to their spatial availability and accessibility, and from the household as a seemingly unified economic unit to the distribution of paid and unpaid work among its members. The project thus translates key propositions of foundational economy theory into observable dimensions of household livability.

Its contribution lies less in producing a single headline indicator than in making visible the relationships that conventional statistics tend to separate. By reading household budgets, infrastructure provision and time-use data alongside one another, the analysis reveals forms of inequality that disappear when income, place and everyday labor are treated as independent domains. The value of this perspective becomes especially clear in the residual-income findings. Nominal household income offers only a partial account of financial security because households must first meet largely unavoidable costs for housing and other essentials. Single-person and single-parent households face comparatively high necessary

¹ The full name of the project is: Perspectives on Inequality in Austria: Residual Income, Social Infrastructure and Time Use (<https://resize.project.tuwien.ac.at/>)

expenditure and correspondingly narrow financial margins, while tenant households lose a substantial share of their disposable resources to housing costs. What appears as an income difference is therefore also a difference in the cost of securing everyday life. This gives empirical substance to a central claim of foundational economy scholarship: access to essential goods and services depends not only on how much income households receive, but on how provision is organized, priced and distributed across space.

Re:sl:Ze, therefore, contributes more than a descriptive account of Austrian inequality. It shows how foundational economy theory can be translated into an empirical research strategy centered on the distribution of resources, access and responsibility. It also broadens the meaning of provision. Provision is not confined to services delivered by the state or purchased in markets. It also includes the work households perform when institutional systems do not meet everyday needs. This makes it possible to analyze privatization not only as a change in ownership, but as a redistribution of costs and responsibilities across the state, markets and households.

The project should consequently be understood as a proof of concept for a broader national and international research agenda. It demonstrates that foundational livability can be approached empirically by placing household budgets, infrastructure and time in relation to one another. It also establishes a baseline from which more integrated research can proceed. The value of this contribution lies not in claiming that all dimensions have already been unified in a single dataset, but in showing that their combination changes what becomes visible. This shift is important for both research and policy. Policies that appear redistributive when evaluated through income may have different consequences once housing costs, mobility requirements or care burdens are considered. Reductions in public provision may appear as fiscal savings while generating additional private expenditure and unpaid work. Conversely, investment in accessible social infrastructure may produce benefits that are not fully reflected in conventional economic indicators. It may increase residual income, reduce time poverty, support paid employment, redistribute care and lessen dependence on individualized private solutions. Re:sl:Ze provides a first empirical basis for making such effects discussable in Austria.

This paper is structured as follows. Section 2 situates the Re:sl:Ze project within the foundational economy literature, focusing on residual income, social reproduction, spatial accessibility and the transfer of costs and responsibilities to households. Section 3 presents the exploratory research design, the three empirical pillars (residual income, social infrastructure and time use) and the Austrian data sources used to operationalize them. Section 4 reports the descriptive findings for each pillar and examines how financial resources, infrastructure

provision and paid and unpaid work intersect across household types, social groups and territories. Section 5 discusses these findings in relation to the privatization of foundational costs, the role of social infrastructure and the intra-household distribution of unpaid work. Section 6 concludes by outlining a research agenda on cumulative foundational advantage and precarity, subjective livability and political discontent, and the ecological distributional effects of different systems of provision.

2 Foundational provision, households and the privatization of costs

2.1 From economic growth to the foundations of everyday life

The foundational economy approach emerged as a critique of economic and regional policies centered on competitiveness, innovation, export-oriented industries and productivity. The original Manifesto for the Foundational Economy called for a “gestalt flip” in industrial policy. Rather than giving priority to a relatively narrow group of technologically advanced and internationally traded sectors, policy should focus on the systems that provide the goods and services required in everyday life (Bentham et al., 2013).

The foundational economy is commonly defined as the part of the economy that produces and distributes goods and services “consumed by all citizens regardless of income or status because they support everyday life” (Bentham et al., 2013). It includes material systems of provision such as energy, water, food, housing, waste and transport, as well as providential services including healthcare, education and care (Foundational Economy Collective, 2018). Hansen (2022) describes these as “mundane services” that are nevertheless essential to human wellbeing.

This perspective challenges the treatment of the economy as a unitary space in which all activities can be assessed using the same metrics. Foundational thinking instead distinguishes between economic zones with different purposes, business models, temporalities and forms of consumption. Foundational sectors are often based on territorially embedded infrastructures, networks and branches, involve long-term investment horizons and facilitate collective rather than exclusively individual consumption (Bärnthaler, 2025). The central normative shift concerns the objective of economic policy. Rather than assuming that economic growth or productivity gains will eventually improve living conditions, foundational economy scholarship argues that policy should directly secure access to welfare-critical goods and services. As

Hansen (2022) puts it, foundational goods and services should take center stage because “the absence of such services restricts possibilities for citizens to live decent lives” (p. 1034).

The foundational perspective also questions the dominance of productivity as a measure of economic success. Froud et al. (2020) distinguish between a technical understanding of the everyday economy as a collection of low-productivity sectors and a social understanding in which the defining characteristic is contribution to wellbeing. From the latter perspective, productivity has limited relevance as a universal target because many foundational activities, including care, education and health, cannot be assessed meaningfully by maximizing output per worker hour. Their social value depends on quality, continuity, accessibility and the relational character of provision.

2.2 Public, private and hybrid provision

The foundational economy literature does not reduce provision to a binary opposition between state and market. Essential goods and services may be provided by central government, municipalities, public enterprises, non-profit organizations, cooperatives, community organizations or private firms². The relevant question is whether institutional arrangements secure affordability, accessibility, quality, continuity and democratic accountability.

Bärnthaler et al. (2021) argue that affordable and high-quality foundational provision is a public responsibility, but not necessarily one that requires direct delivery by the central state. Housing associations, cooperatives and coalitions of local and regional actors may play important roles, particularly where they are responsive to territorial circumstances. Similarly, Plank (2020) emphasize the diversity of possible ownership and governance arrangements, including public, cooperative and non-profit forms. For private providers, foundational economy scholarship has proposed the principle of the social license. Providers operating in protected, regulated or territorially anchored markets should accept social

obligations in exchange for the right to operate. These may include commitments concerning service quality, wages, employee training, local procurement, reinvestment, taxation, debt and environmental practices (Foundational Economy Collective, 2018).

Hansen (2022) therefore notes that the foundational approach does not necessarily require “ownership changes from private to public” (p. 1035). Instead, private providers may be governed through social licenses that require social returns and responsible financial practices. This distinction is important for the present research agenda. The transfer of costs to households cannot be inferred from ownership alone. A publicly owned service may still be inaccessible or underfunded, while a private or cooperative provider may be strongly regulated and universally accessible. The analysis must therefore consider ownership, financing, regulation, spatial accessibility and household outcomes jointly.

Yet the literature is highly critical of the financialization of foundational sectors. Foundational services generally require stable investment, moderate returns and long time horizons. Financialized business models instead privilege short-term returns, debt-financed extraction and shareholder value. This tension has contributed to pressure on wages and working conditions, the squeezing of suppliers and declining service quality (Bayliss et al., 2023).

González and Taylor (2026) extend this argument by conceptualizing foundational sectors as sites of value struggles. In their analysis of marketplaces, foundational roles such as everyday provisioning, social interaction and local attachment conflict with commercial and real-estate valuations. Foundational assets are therefore not inherently or permanently foundational. Their role is politically contested and depends on the value regimes through which they are governed.

2.3 Residual income and the household effects of provision

A key contribution of foundational economy research is the concept of residual income. Rather than treating post-tax income as an adequate indicator of living standards, residual income subtracts unavoidable expenditure on essential goods and services, such as housing, utilities and transport. It therefore measures the resources households retain after meeting basic needs. This distinction matters because households with comparable incomes can face substantially different necessary expenditures. Housing tenure, energy efficiency, household composition, regional prices and access to collective services all affect the portion of income that remains available. Bärnthaler et al. (2021) describe residual income as an alternative to GDP- and market-income-based measures because it places private income in relation to

² We use “privatization” throughout to cover two related but distinct mechanisms by which the cost of an unmet need is shifted onto households, rather than in the narrow sense of asset sale or contracted-out delivery alone. The first is market privatization (or marketization): households pay directly for a service that was previously free or subsidized, or that a well-functioning collective system would have provided. This mechanism is captured primarily through residual income. The second is household privatization (or familialization): the need is met through unpaid labor inside the household rather than through any monetary transaction at all. This mechanism is captured primarily through time use. Social infrastructure functions as the shared driver of both: weak or inaccessible provision can push households toward either track, or both simultaneously. This two-track distinction follows the logic already present in Bärnthaler et al. (2021), who describe the “privatization” of unpaid reproductive work as continuous with, but distinct from, market privatization.

infrastructure-based collective consumption. Residual income also alters the interpretation of successful and unsuccessful regions. A region with high wages or gross value added may still offer poor foundational livability if housing, mobility and/or utility costs absorb a large share of household income. Conversely, collectively provided services may improve living standards without directly increasing private monetary income. The concept is particularly relevant to the question of cost privatization. When collective services are withdrawn or become more expensive, the effect may appear as an increase in household expenditure rather than a reduction in nominal income. The resulting decline in residual income can therefore be interpreted as one possible household-level effect of changes in systems of provision (Bayliss et al., 2021).

However, residual income has important limitations. As Bärnthaler et al. (2021) note, measuring resources at household level may obscure the unpaid work through which household members meet needs. Although income may be pooled, time and responsibility are not necessarily shared equally. Residual income can therefore conceal “the uneven distribution of unpaid work within the household” (p. 6., italics in original) which is central to gender inequality.

2.4 Time use, social reproduction and intra-household inequality

Feminist economics provides a necessary extension to foundational economy analysis by emphasizing social reproduction and unpaid work. Everyday life depends not only on goods and services purchased in markets or provided by the state, but also on cooking, cleaning, childcare, eldercare, household administration and emotional support. Much of this work is performed without pay and is distributed unequally by gender (Sayer, 2016).

Bärnthaler et al. (2021) argue that foundational thinking has historically concentrated too heavily on paid employment and monetized provision. They therefore call for the “revaluating [of] unpaid work” (p.1) and for time-use surveys to become an integral component of foundational measures of livability. They further argue that adequate time-use metrics are required “to make unpaid work visible” (p. 6) and to identify activities that sustain everyday life and human flourishing. The relationship between infrastructure and unpaid work is particularly important. If childcare, schools, healthcare or shops are distant, poorly coordinated or unavailable at relevant times, households must spend more time travelling, organizing and providing care themselves. These time costs may affect employment possibilities, leisure, rest and social participation.

Bassens et al. (2025) conceptualize these relations through the interaction of money, space and time. Foundational practices involve the daily movements households make between the home, workplace, school, shops, healthcare and other services. They emphasize that these practices differ among household members and note that women, because of their continuing role as primary caregivers, are often disproportionately involved in time-consuming care and trip-chaining activities. Higher-income households may be able to respond to these constraints by purchasing private services, outsourcing domestic tasks or using private mobility. The authors describe this as the capacity to “buy time” (p. 10). Lower-income households, by contrast, may depend more heavily on self-provision through cooking, cleaning and care. The substitution of public or collective provision by household labor is therefore likely to be both classed and gendered.

This perspective changes how privatization is understood. Privatization is not limited to the sale of state-owned assets or the outsourcing of services. It may also involve the less visible transfer of responsibility into households. Bärnthaler et al. (2021) refer to the continued subordination of unpaid to paid labor as reinforcing the “privatization” of socially necessary reproductive work.

2.5 Space, accessibility and foundational livability

Foundational goods and services are spatially organized. Their value depends not only on whether they formally exist, but on whether households can reach and use them. Accessibility is shaped by distance, transport options, opening hours, service capacity, cost and household time constraints. Bassens et al. (2025) argue that current debates about regional inequality focus too strongly on aggregate measures such as productivity, output and employment. Such measures may conceal major differences in everyday living conditions within the same region. They therefore propose the concept of foundational livability, which examines how household characteristics interact with income and the spatial organization of foundational systems.

From this perspective, proximity to affordable, high-quality services can free both time and money. Conversely, poor accessibility may generate transport poverty, constrain employment choices and intensify unpaid work. Bassens et al. (2025) distinguish between foundational privilege and foundational precarity. Privileged households may have high residual income, short travel times, high-quality services and the ability to outsource domestic work. Precarious households may face low residual income, longer journeys, poor-quality provision and a greater reliance on gendered unpaid labor.

Spatial inequalities can consequently become intra-household inequalities. For example, where a household has only one car, access to full-time employment may be concentrated in the person who uses it, while other household members remain restricted to local employment and care activities. Poor public transport and low-density development can therefore influence both the household's monetary budget and the division of labor within it.

3 Data and Methods

3.1 Research Design

Re:sl:Ze adopts an exploratory, descriptive, multidimensional research design to examine inequality in Austria through three interrelated dimensions: residual income, social infrastructure and time use. The methodological starting point is that no single dataset or indicator can adequately capture the conditions under which households organize everyday life. Income records monetary resources, but not how much of those resources must be spent on unavoidable needs. Infrastructure data describe the territorial organization of services, but not how households compensate when these services are absent or difficult to reach. Time-use data reveal the work performed inside households, but not the financial and spatial conditions under which this work takes place.

The analysis therefore brings together different forms of evidence that are usually considered separately. Household expenditure data are used to examine the resources available after necessary costs. Spatial data are used to represent the availability and accessibility of essential services. Time-use data are used to investigate the distribution of paid and unpaid work between women and men and across different household and territorial contexts. This combination reflects the central premise of foundational economy research: Everyday wellbeing is generated through systems of provision rather than through private income alone. Household income, infrastructure and time are therefore treated not as independent dimensions, but as different elements of the same provisioning process.

The empirical analyses presented in Re:sl:Ze are primarily descriptive. They compare median or average outcomes across income groups, household types, housing tenures, educational groups, employment arrangements, municipality-size categories and levels of infrastructure provision. The purpose is not to estimate causal effects or to construct a single model of inequality. Instead, the analyses identify systematic patterns that become visible when monetary, spatial and temporal dimensions are examined alongside one another.

This descriptive orientation is an important first step in the empirical development of foundational economy research. The literature offers a substantial theoretical account of foundational provision, social reproduction and livability, but rarely operationalizes these concepts through multiple forms of household and spatial data. Re:sl:Ze demonstrates how existing official and geospatial datasets can already be used to translate theoretical propositions into observable relationships in Austria. The approach can therefore be understood as both an empirical status assessment and a methodological proof of concept. It documents current inequalities while establishing a framework that can support more advanced analyses in the future. The descriptive findings identify relevant associations, clarify which dimensions should be analyzed jointly and provide a basis for subsequent multivariate, longitudinal, spatial and causal research.

3.2 Household income, necessary expenditure and residual income

The financial component of the analysis is based primarily on the Austrian Household Budget Survey 2019/2020 conducted by Statistics Austria. The survey provides information on household income and consumption expenditure and allows the project to distinguish between total resources and the portion of income absorbed by necessary expenditure.

Residual income is defined as household income after the deduction of expenditure required to meet basic needs. The Re:sl:Ze analysis includes necessary expenditure in the areas of housing, food, health, mobility and education. These categories are broadly relevant across households, although the amount spent varies substantially by income, household composition, tenure and place. The purpose of the residual-income measure is to distinguish nominal income from the financial resources households can actually use after essential needs have been met. Two households with similar incomes may have very different residual incomes where one faces higher rent, mobility or health costs. Residual income is therefore better suited than income alone to identifying the financial consequences of different systems of provision.

The descriptive analyses compare income, necessary expenditure and residual income across income quintiles, household types, federal states, municipality-size categories and tenure groups. Particular attention is given to tenant households because housing costs and tenure structures substantially affect comparisons between regions. For comparisons, the values are equalized using an OECD-based scale in order to account for household size and composition. In the project presentation, a single-person household receives a weight of 1, two adults a weight of 1.5, and a couple with one child under the age of 14 a weight of 1.8. Both absolute expenditure

and expenditure relative to income are considered. This distinction is important because necessary expenditure may appear relatively similar in absolute monetary terms across income groups while placing very different pressures on household budgets.

3.3 Social infrastructure as the empirical core

As foundational livability highlights the spatial component of provisioning systems, the social-infrastructure dataset forms the empirical core of the Re:sl:Ze framework. Residual income and time use measure important household outcomes, but infrastructure provides the connecting layer between household conditions and the broader organization of foundational provision. It captures the territorial context within which households must satisfy essential needs.

Social infrastructure is understood here as the network of facilities and services that support everyday life, including provision in areas such as childcare, education, healthcare and other essential services. Its relevance extends beyond the simple presence of a facility. What matters is whether households have meaningful access to the services on which everyday life depends. A well-developed infrastructure can reduce travel, save money and time, support labor-market participation and reduce the amount of care and organizational work that must be performed privately. The project accordingly describes social infrastructure as indispensable provision that can create security and save households distances, time and money.

The infrastructure analysis combines information from a range of administrative and geospatial sources. These include the Austrian childcare statistics, medical-provider directories, information from the Austrian health and social-affairs administration, OpenStreetMap, data.gv.at, education-related administrative sources and supplementary online location information. Bringing these sources together makes it possible to move beyond isolated sectoral indicators and towards a more comprehensive representation of the local foundational environment. The resulting infrastructure indicator classifies municipalities according to their overall level of provision. The importance of this dataset is analytical as well as empirical. Social infrastructure represents the institutional and spatial conditions that mediate between household needs and household resources. Where services are accessible, needs can be met partly through collective provision. Where provision is weak, households may have to compensate through market purchases, travel or unpaid labor. Infrastructure therefore makes it possible to investigate how the organization of provision influences the location and form of everyday costs.

This is particularly important because infrastructure inequalities are not reducible to a simple urban-rural distinction. Municipality size provides a useful territorial classification, but settlements of similar size may differ in the quantity, diversity and accessibility of their services. A dedicated infrastructure indicator offers a more direct measure of the foundational environment than population size alone. It enables comparisons between areas that may be similar demographically but differ substantially in the resources available to residents. The social infrastructure data also provide the basis for connecting the three main dimensions of Re:sl:Ze. Infrastructure provision can be compared with financial burden to investigate whether poorly served areas are associated with higher necessary expenditure or reduced household flexibility. It can also be related to time use to examine whether service scarcity corresponds with increased unpaid work.

3.4 Time-use data and intra-household inequality

The time-use component is based on the Austrian Time Use Survey 2021/2022 conducted by Statistics Austria. Time use is analyzed because monetary household indicators do not reveal how necessary work is distributed between individual household members. Whereas income is generally pooled and measured at household level, time remains an individual and finite resource. The analysis distinguishes particularly between paid employment and unpaid work, including household labor, childcare and care for other household members. It examines variation by gender, education, employment status, household composition, municipality size and infrastructure provision.

This individual-level perspective is essential for identifying intra-household inequality. A household may have a moderate or high income while its members experience very different combinations of paid work, unpaid work and discretionary time. Time-use data therefore make visible forms of inequality that disappear when the household is treated as a single unit. The analyses focus on adults of working age and compare average daily time allocations across groups. The project notes that persons aged 15 and above living in the household are counted as adults in the relevant household classifications. This affects the interpretation of categories that may include older children or care-dependent adult relatives.

3.5 Austria as a case

Austria provides a particularly instructive case for examining foundational provision and multidimensional livability and inequality. It combines a comparatively extensive welfare state with substantial territorial, institutional and household-level variation. Essential services are shaped

by a federal governance structure involving the national government, nine federal states and municipalities, while provision also includes social-insurance bodies, non-profit organizations and private providers. This institutional diversity makes Austria analytically valuable. National averages can suggest relatively comprehensive provision, yet the conditions under which households access services differ significantly across federal states, municipalities and settlement types. Responsibilities for services such as childcare, education, healthcare, care and transport are distributed across levels of government and organizational forms. As a result, households may encounter very different local configurations of foundational provision within the same national welfare system.

Austria's settlement structure also creates a useful context for spatial analysis. Vienna constitutes a large metropolitan center with a distinct housing market, public-transport system and infrastructure density. The remaining federal states contain combinations of medium-sized cities, suburban areas, small towns, rural municipalities and alpine or peripheral settlements. Municipality size and remoteness influence the distances households must travel, the range of services available locally and the feasibility of providing specialized facilities.

Austria is also relevant because of the continuing importance of gendered employment and care arrangements. The time-use evidence shows substantial differences between women and men in unpaid work, particularly in couple households with children and among part-time workers. These patterns interact with local infrastructure: women in smaller and more poorly provided municipalities perform more unpaid work, while men's contribution varies less across space.

The Austrian case therefore makes it possible to examine foundational inequality within a relatively affluent welfare state. The central issue is not simply whether services exist nationally, but how their organization produces different household outcomes across places and social groups. This is theoretically important because foundational precarity should not be understood only as the complete absence of welfare institutions. It can also arise through uneven accessibility, affordability, capacity and the private work required to compensate for gaps in otherwise extensive systems. However, Austria is not an exceptional or isolated case. The dimensions and relationships examined by Re:sl:Ze between essential expenditure, infrastructure access, and unpaid work are relevant to other European welfare states characterized by decentralized provision, urban-rural differences and gendered care regimes. The Austrian analysis can therefore contribute to broader comparative research on how welfare institutions and spatial structures distribute the costs of everyday provision.

4 Results

The results are organized around the three pillars of the Re:sl:Ze framework: residual income, social infrastructure and time use. Each pillar captures a different dimension of inequality. Residual income shows the financial resources that remain after households have met essential needs. Social infrastructure describes the spatial conditions under which those needs can be met through collectively organized services. Time use reveals how the work of maintaining everyday life is distributed within households.

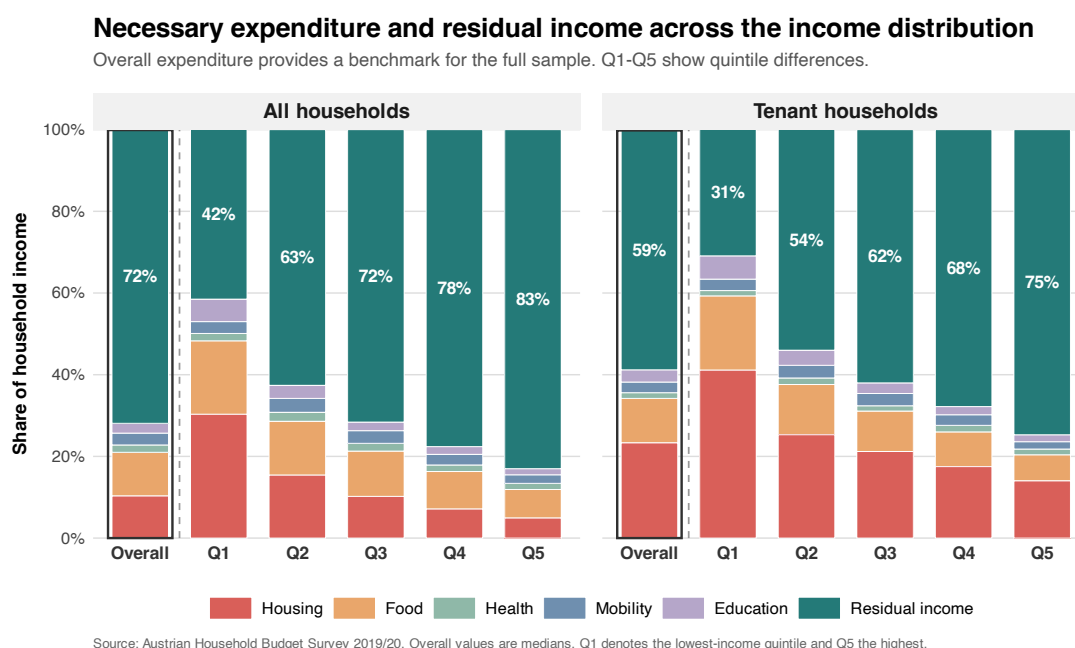


Figure 1: Necessary expenditure and residual income across income quintiles for all versus tenant households.

Taken together, the findings reveal a multi-dimensionality of inequality that becomes visible only when income, infrastructure and time are considered in combination. Household income by itself says little about the resources that remain once essential needs have been met. Necessary expenditure reshapes the distribution of effective financial security, access to childcare, health care, education and other foundational services varies considerably between municipalities, and the unpaid work required to sustain everyday life remains distributed unequally. These dimensions, however, are not isolated from each other. They interact in ways that can reinforce advantages and disadvantages. Lower living costs may be offset by weak infrastructure, while inadequate provision can reappear as longer journeys, higher private expenditure or additional unpaid work within the household.

4.1 Residual income: Necessary expenditure amplifies financial inequality

The residual-income analysis begins with the distinction between household income and the resources that remain after essential expenditure. Necessary expenditure includes housing, food, health, mobility and education. Figure 1 shows necessary expenditure and residual income for all households as well as only tenant households across the income distribution. Across all Austrian households, approximately 72 per cent of household income remains after these categories have been deducted. Among tenant households, however, the corresponding share falls to approximately 59 per cent. The difference is driven particularly by housing: whereas all households spend, on average, around 10 per cent of their income on housing, the share exceeds 23 per cent among tenants. This first

result demonstrates that housing tenure is central to households' effective financial position. Analyses based only on income conceal the very different costs faced by owners and tenants. Tenant households have less financial room for savings, unexpected expenditure, leisure or investment even where their nominal income resembles that of other households.

The distributional consequences become particularly visible when households are compared across income quintiles in Figure 1. In absolute terms, expenditure on necessities does not vary as dramatically as income itself. All households require housing, food, mobility, health and education. Relative to income, however, the differences are substantial. The lowest-income quintile spends almost 60 per cent of its income on necessary expenditure. By contrast, the highest-income quintile spends only around 20 per cent on the same broad categories. Middle-income households retain more than 70 per cent of their income after necessary costs, while the lowest-income households have much less capacity to absorb unexpected expenditure. The disparity is even greater among tenants. After necessary expenditure, tenant households in the lowest income quintile retain only around 30 per cent of their income. The relative burden of housing declines steadily with income and accounts for approximately 14 per cent of income among tenants in the highest quintile.

Necessary expenditure therefore has a regressive effect. Although essential needs are broadly shared, their costs absorb a much larger proportion of the resources of low-income households. Higher-income households are not only able to spend more in absolute terms, but they also retain a disproportionately larger share of income once necessities have been met.

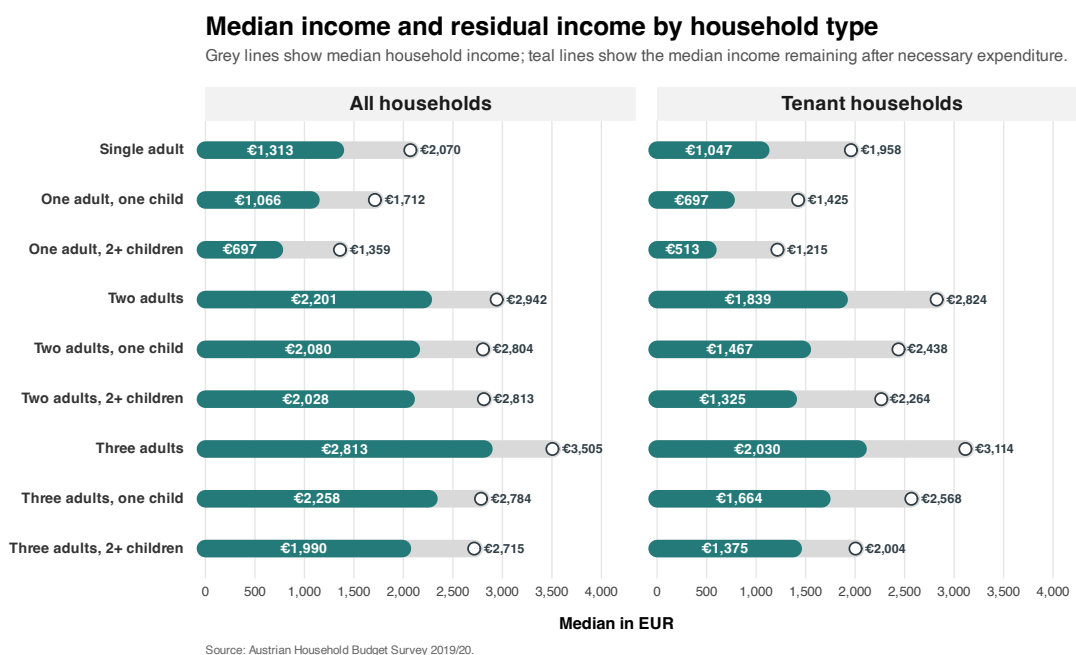


Figure 2: Median income and residual income by household type.

Household composition structures financial vulnerability

Residual income also differs markedly by household type (Figure 2). Single-person and single-parent households have lower incomes and carry relatively high necessary costs because they cannot share fixed expenditures across several income earners. They consequently have lower residual incomes and face greater difficulty covering living costs than many couple households. The pattern reflects both economies of scale and labor-market participation. Additional household members increase expenditure, but additional earners may increase income more strongly. A household combining full-time and part-time employment may therefore retain more income than a household dependent on one full-time earner, even after equivalence weighting.

Education and employment differences are magnified after essential costs

Figure 3 shows that education is strongly associated with residual income because necessary expenditure must be met by households across educational groups, whereas access to well-paid employment differs considerably. Among households in which all working-age members are employed full time, those whose highest educational qualification is compulsory schooling have a median residual income of approximately €1,100. Where at least one household member has completed post-secondary or tertiary education, the corresponding figure is approximately €2,800. Differences also persist among households involving part-time employment. Households with post-secondary or tertiary education retain around €400 more in median residual income than households whose highest qualification is compulsory schooling.

These results show that full-time employment alone does not guarantee comparable financial security. Wage levels and employment quality matter because necessary costs create a floor below which expenditure cannot easily be reduced. Educational inequalities in labor-market returns are therefore reproduced, and in some cases intensified, at the level of residual income. The comparatively low residual incomes of part-time households are particularly concerning in the Austrian context, where part-time employment is highly gendered and closely associated with care responsibilities. Educational differences within part-time households may therefore overlap with gendered divisions of paid and unpaid work, especially among mothers, and contribute to longer-term inequalities in earnings, social-security entitlements and financial resilience

Regional outcomes depend on housing tenure and local costs

Substantial differences are also evident between federal states and municipality-size categories, as shown in Figure 4. When all households are considered together, Vienna has comparatively high expenditure and, together with Carinthia, among the lowest household and residual incomes. Upper Austria and Lower Austria show the highest residual incomes. The interpretation changes once the analysis is restricted to tenant households. Vienna no longer records the highest housing expenditure and instead has the highest residual income among tenants. Rents are highest in Vorarlberg, followed by Salzburg, while tenant households in Burgenland and Carinthia face the lowest rental costs.

Residual income rises with educational attainment

The education gradient is particularly strong in households where all working-age members are employed full-time.

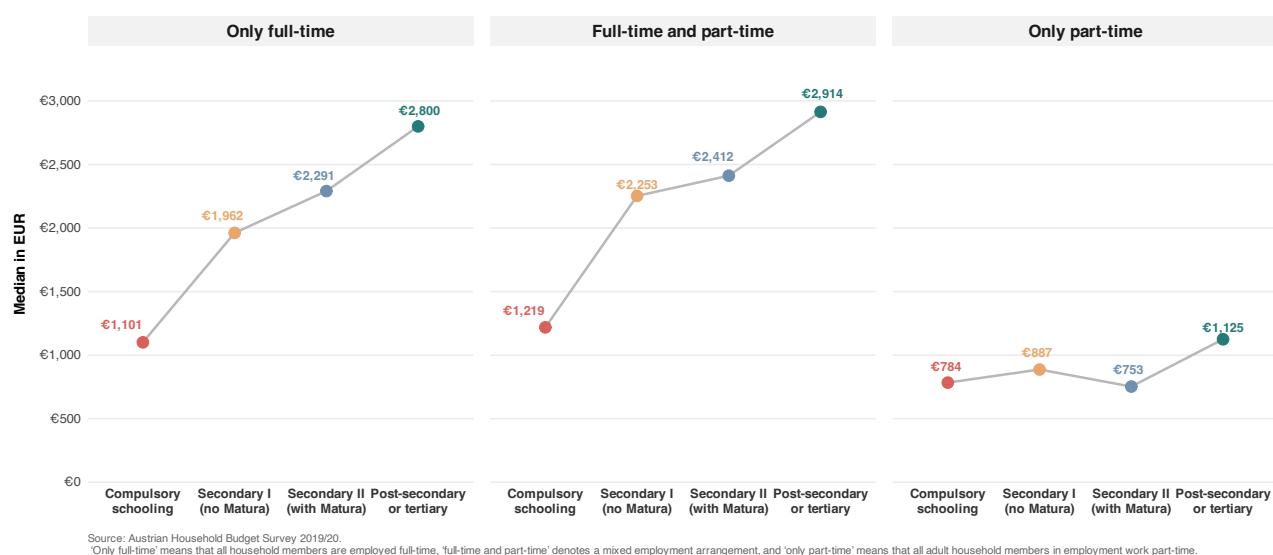
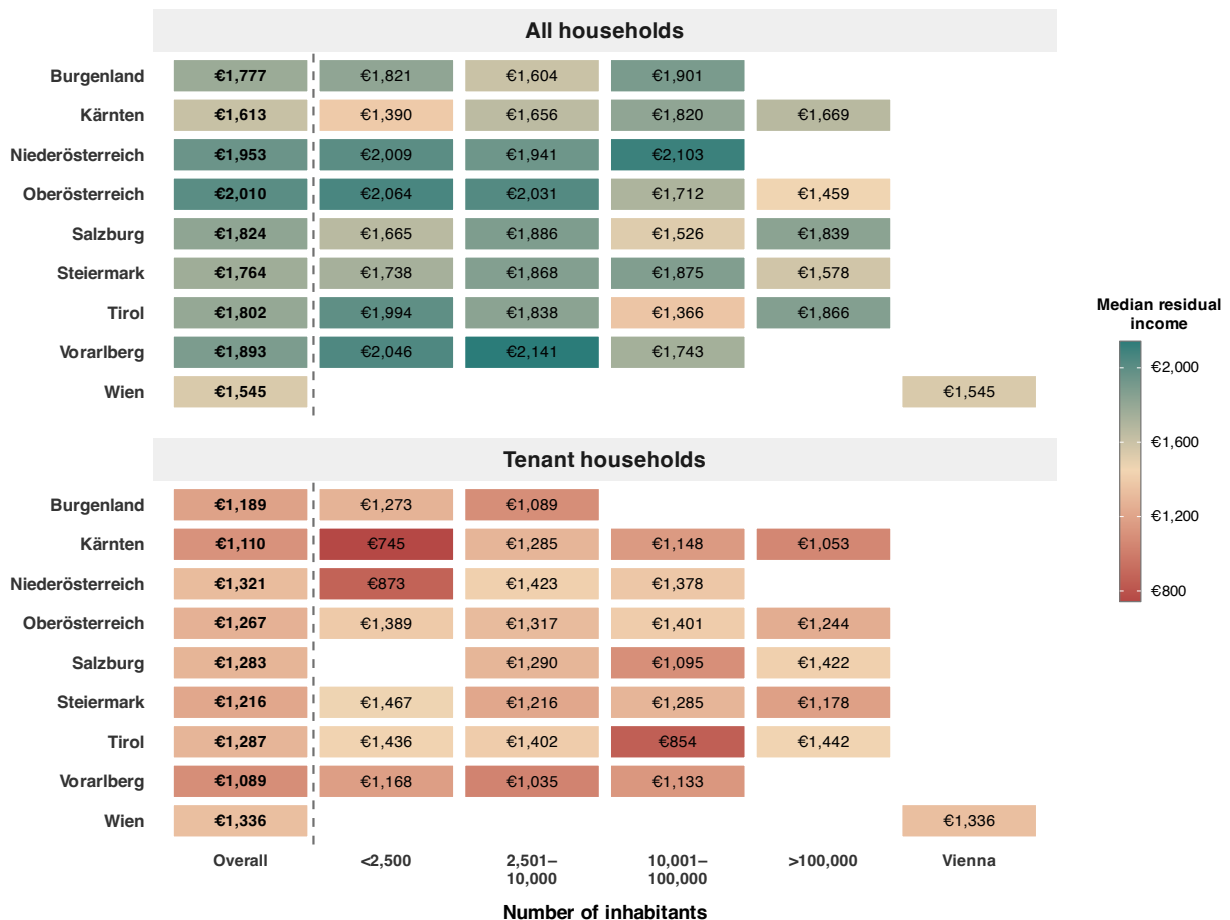


Figure 3: Median residual income by educational attainment and household employment composition.

Residual income varies across federal states and municipality sizes

The Overall column provides the federal-state benchmark; the remaining cells show variation across municipality-size classes.



Source: Austrian Household Budget Survey 2019/20.
Values are median residual income in EUR. Blank cells indicate municipality-size combinations that are not represented in the data.

Figure 4: Median residual income by federal state and municipality size.

The contrast reflects Austria's spatially uneven tenure structure. Vienna contains a much larger proportion of tenants, meaning that housing expenditure is captured more directly for a larger share of households. In smaller and more rural municipalities, higher rates of owner occupation can produce apparently higher residual incomes, especially where mortgage repayments are not included in the expenditure measure. Vienna records a residual income of around €1,545 when all households are considered, while smaller municipalities in several federal states show higher values.

These findings caution against interpreting higher residual income automatically as higher livability. In rural areas, low recorded housing expenditure may coexist with weaker public transport, fewer nearby services and greater dependence on private mobility or unpaid household provision. The financial advantage associated with lower costs can therefore be offset by infrastructural and temporal disadvantages.

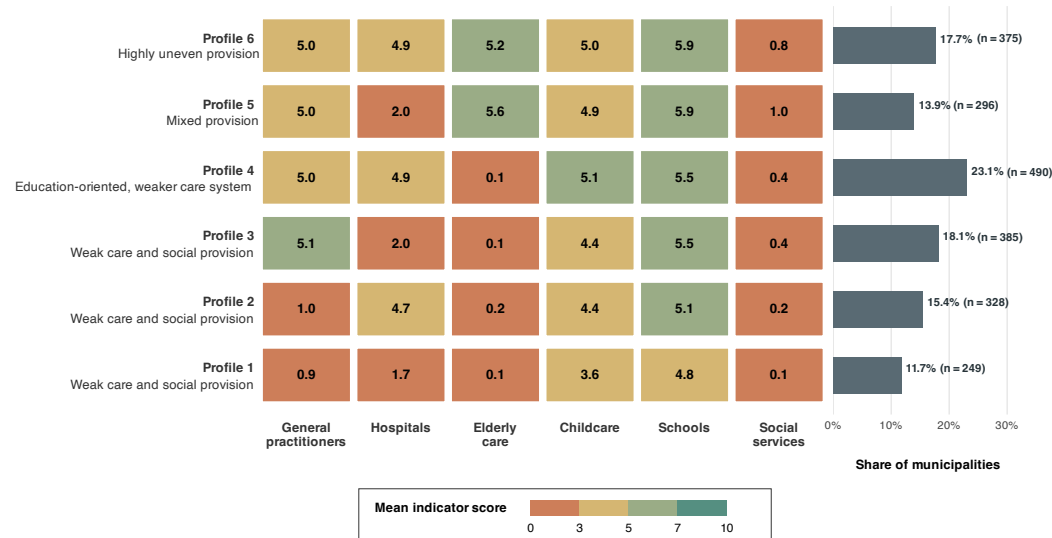
4.2 Social infrastructure: Uneven access to the foundations of everyday life

The second pillar examines the availability and accessibility of six areas of social infrastructure. The indicator relates services to local need, for example, general practitioners to the population, kindergarten groups to children aged three to six, and elderly-care places to the population aged over 70. Provision in neighboring municipalities is also included at a lower weight where it can be reached within 30 minutes by car or public transport. The indicator ranges from 0 to 10. A value of 0 signifies that a service is neither locally available nor accessible, while a value of 10 represents very good provision and accessibility, taking into account proximity, capacity and appropriate opening arrangements.

The results show that the Austrian infrastructure provision cannot be reduced to a simple division between adequately and inadequately served regions. A cluster analysis of the six indicators identifies six recurring municipal infrastructure profiles, each combining different

Austria’s municipalities follow distinct infrastructure profiles

The profiles are derived from all six service indicators. Each cell shows the profile’s mean score, while the bars show how common each profile is.



Source: Self-collected data from Statistics Austria’s childcare statistics, Docfinder, the Austrian Medical Professions Handbook, the Federal Ministry of Social Affairs and Health, OpenStreetMap, data.gv.at, the Federal Ministry of Education, and Google

Figure 5: Social-infrastructure profiles across Austrian municipalities.

strengths and weaknesses (Figure 5). The weakest profile, accounting for 11.7 per cent of municipalities, combines very limited access to general practitioners, hospitals, elderly care and social services with only moderate childcare and school provision. A further 15.4 per cent of municipalities have comparatively good access to hospitals, childcare and schools, but weak general-practitioner, elderly-care and social-service provision. Another 18.1 per cent display the opposite healthcare pattern: access to general practitioners and schools is relatively strong, while hospital access, elderly care and social services remain weak. These profiles demonstrate that even municipalities with some well-developed services can lack essential parts of the wider infrastructure system.

The largest profile, comprising 23.1 per cent of municipalities, performs relatively well in relation to general practitioners, hospitals, childcare and schools, but records almost no elderly-care or social-service provision. This is particularly important because it shows how a municipality may appear broadly well served when attention is limited to education and general healthcare, while still offering a highly incomplete system of care and social support. Strong provision in one field therefore cannot be assumed to compensate for the near absence of another. Only the two strongest profiles, together covering 31.6 per cent of municipalities, achieve medium or good elderly-care provision. One of these combines relatively strong elderly care, schools, childcare and general-practitioner access with weak hospital access. The strongest profile performs comparatively well across five of the six dimensions yet still records a very low social-services score. Social services are therefore not merely weak in the most disadvantaged municipalities; they constitute a structural gap across the entire profile distribution. Even municipalities with

otherwise broad provision often lack an adequate social-service infrastructure.

Taken together, Figure 5 shows that foundational livability depends on the completeness of the local service system rather than on strength in a single dimension. Schools are the most consistently well-provided service across the profiles, while elderly care and social services generate the largest gaps. Because the overall indicator gives equal weight to all six dimensions, a major deficit in one field can substantially reduce a municipality’s overall score.

At the same time, regional accessibility frequently depends on private transport, as shown in Figure 6. The deterioration of the infrastructure rating when public rather than private transport is considered indicates that some apparent provision is conditional upon household car access. This matters economically, temporally and ecologically. Private mobility requires expenditure, consumes time and reinforces car-dependent spatial structures.

The distribution of the individual indicators shows particularly weak provision in care and social services. Social service institutions are the least widely available category, partly because their absolute number is comparatively small. Elderly care is also highly uneven: only about 10 per cent of municipalities achieve medium, good or very good provision in this area. Schools and childcare facilities display a more favorable pattern when accessibility by car is considered. No municipality is classified as poorly served in relation to schools, and the same applies to childcare under the car-accessibility measure. The assessment deteriorates, however, when accessibility by public transport is used. Many municipalities then move

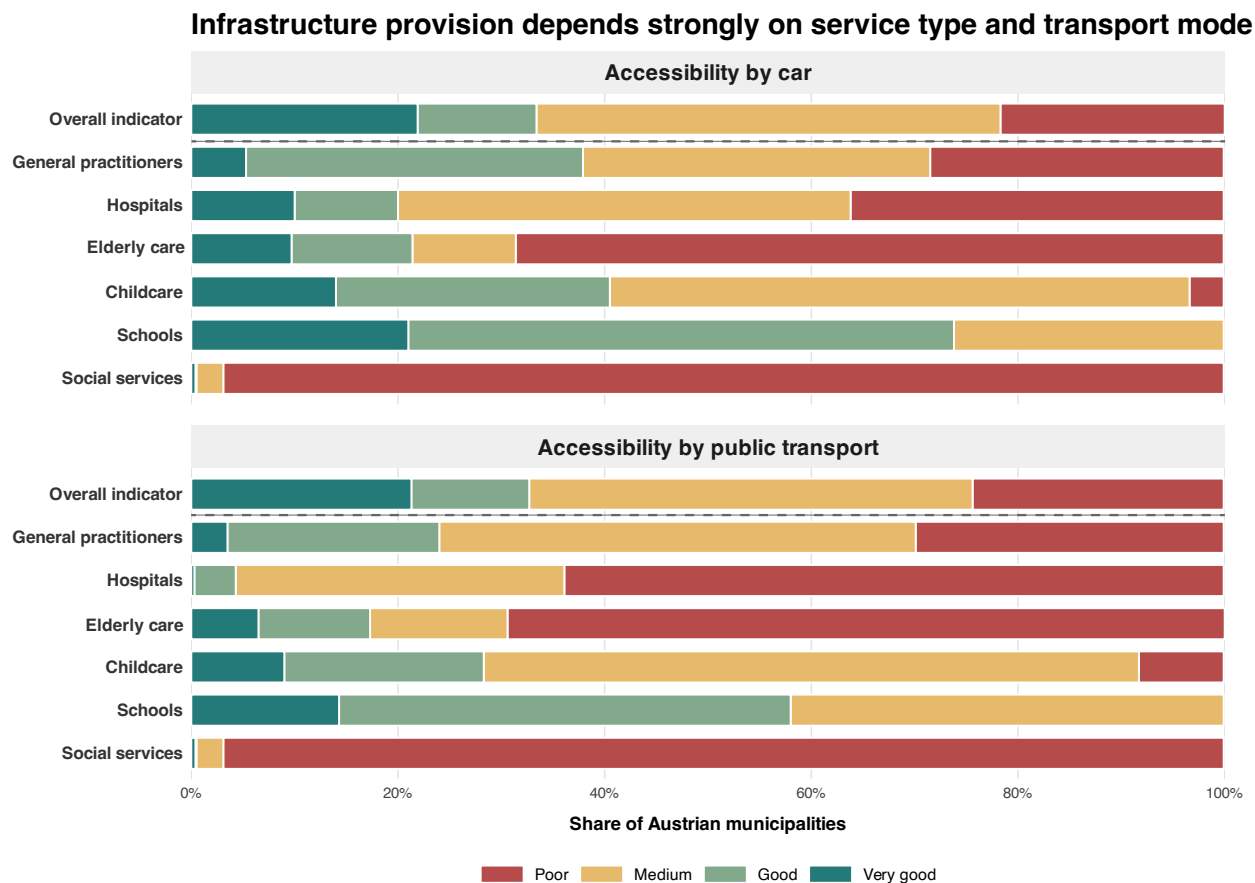


Figure 6: Infrastructure provision by accessibility by car and public transport.

into lower categories, and only a small number achieve very good provision across several infrastructural fields.

The difference between car and public-transport accessibility exposes an important form of hidden inequality. Formal access may appear adequate where households are assumed to possess and use a car. For those without access to private mobility or where one vehicle is shared within the household the same infrastructure landscape may be substantially less accessible.

Differences within federal states exceed many differences between them

At the level of federal-state averages, social-infrastructure provision appears relatively similar across much of Austria, with Vienna standing out as the clearest exception. The mean scores of the other federal states are clustered within a comparatively narrow range. Taken alone, these averages could suggest that regional differences are modest.

The municipality-level distributions in Figure 7 tell a more complex story. In several federal states, the spread of scores is wide, and the middle 50 per cent of municipalities already covers a substantial range of provision. The tails extend further still, showing that some municipalities within the same federal state achieve comparatively strong infrastructure scores while others remain much more weakly served. The overlap between the state distributions is considerable: a relatively well-served municipality in a lower-scoring federal state may outperform a weakly served municipality in a state with a higher average. Vienna differs not only because its average is higher, but also because its municipal districts are embedded in a dense metropolitan infrastructure system. Services are more numerous, spatially concentrated and often reachable across district boundaries. In the other federal states, provision is more dispersed and municipal scores are shaped more strongly by local availability and access to neighboring municipalities.

This within-state variation is substantively important because federal-state means describe administrative territories rather than the service environments households encounter in everyday life. Two households

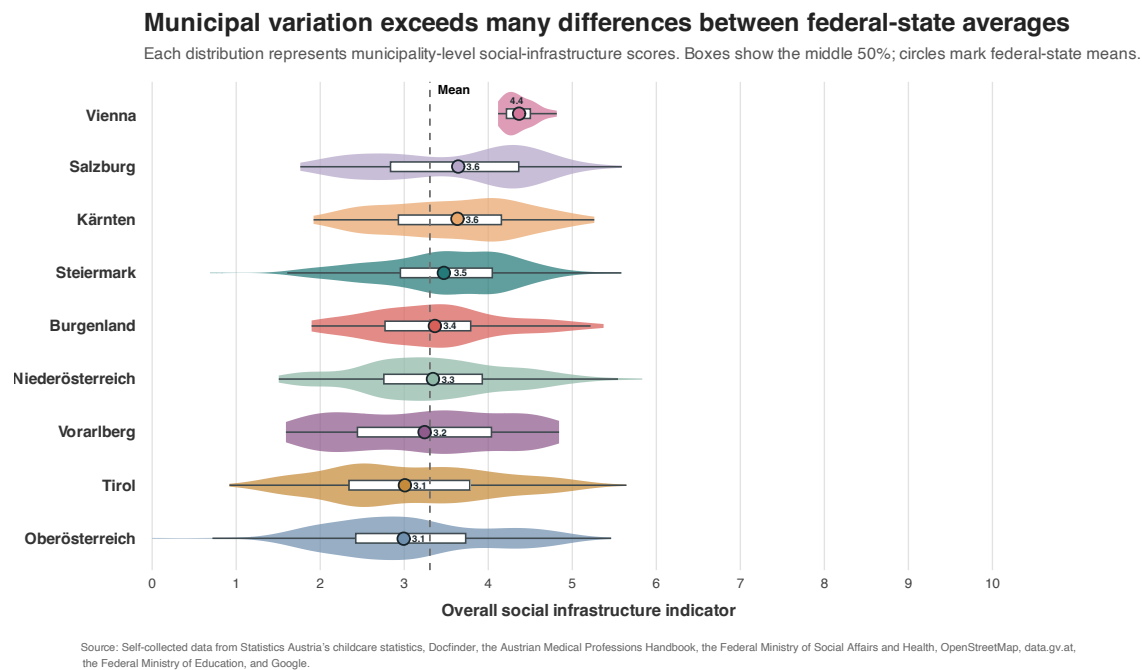


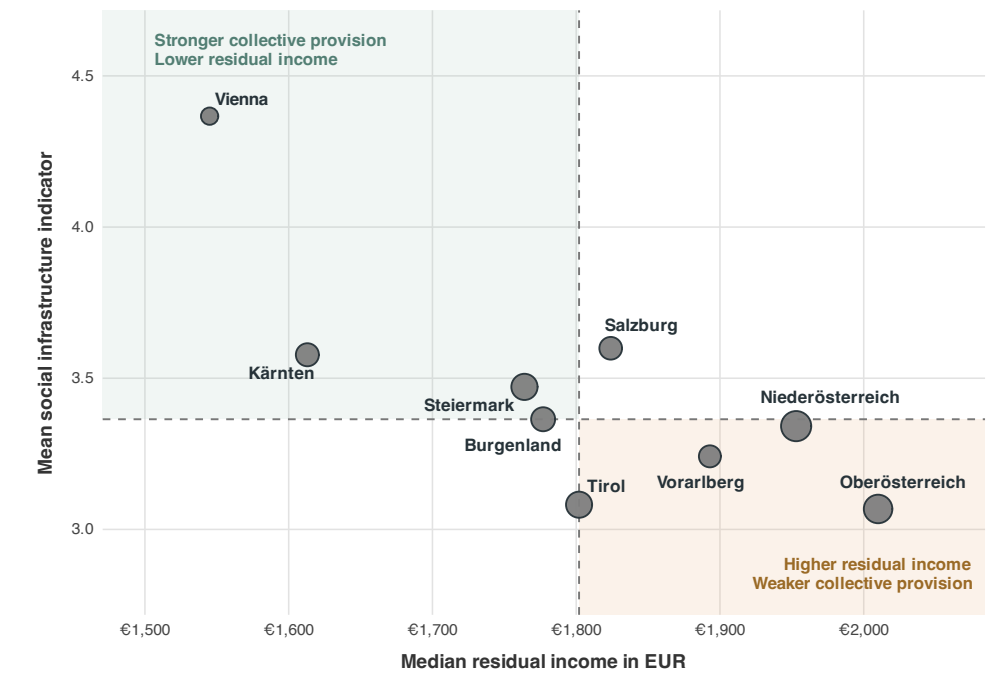
Figure 7: Municipal variation in social infrastructure provision within Austrian federal states.

located in the same federal state may face very different combinations of access to general practitioners, hospitals, childcare, schools, elderly care and social services. One municipality may provide a relatively complete local system, while another may depend heavily on facilities located elsewhere or may lack particular services altogether.

The findings therefore caution against treating national or federal-state averages as sufficient indicators of foundational livability. Such averages smooth over the local mismatches that matter most to households: adequate schooling but weak elderly care, accessible primary healthcare but limited hospital access, or relatively strong childcare alongside an absence of social-

The geography of residual income differs from the geography of infrastructure

Federal-state averages compare median residual income with mean municipality-level social-infrastructure provision.



Source: Self-collected data from Statistics Austria's childcare statistics, Docfinder, the Austrian Medical Professions Handbook, the Federal Ministry of Social Affairs and Health, OpenStreetMap, data.gv.at, the Federal Ministry of Education, Google, and Austrian Household Budget Survey 2019/20.

Figure 8: Federal-state averages of residual income and social-infrastructure provision in Austria.

service institutions. The municipality and its accessible surroundings are consequently the more meaningful spatial scale for assessing everyday infrastructure provision.

Infrastructure and financial burden do not follow the same geography

The comparison between residual income and infrastructure in Figure 8 shows that financial and infrastructural advantage do not necessarily coincide. Some smaller municipalities have relatively high residual incomes because of lower housing costs and higher owner-occupation rates yet offer weaker social infrastructure. Vienna, by contrast, records relatively low residual income when all households are considered but has the best infrastructure provision.

This divergence illustrates why neither dimension can serve as a complete proxy for livability. Low living costs may produce financial room but may require households to travel further, own a car or organize care privately.

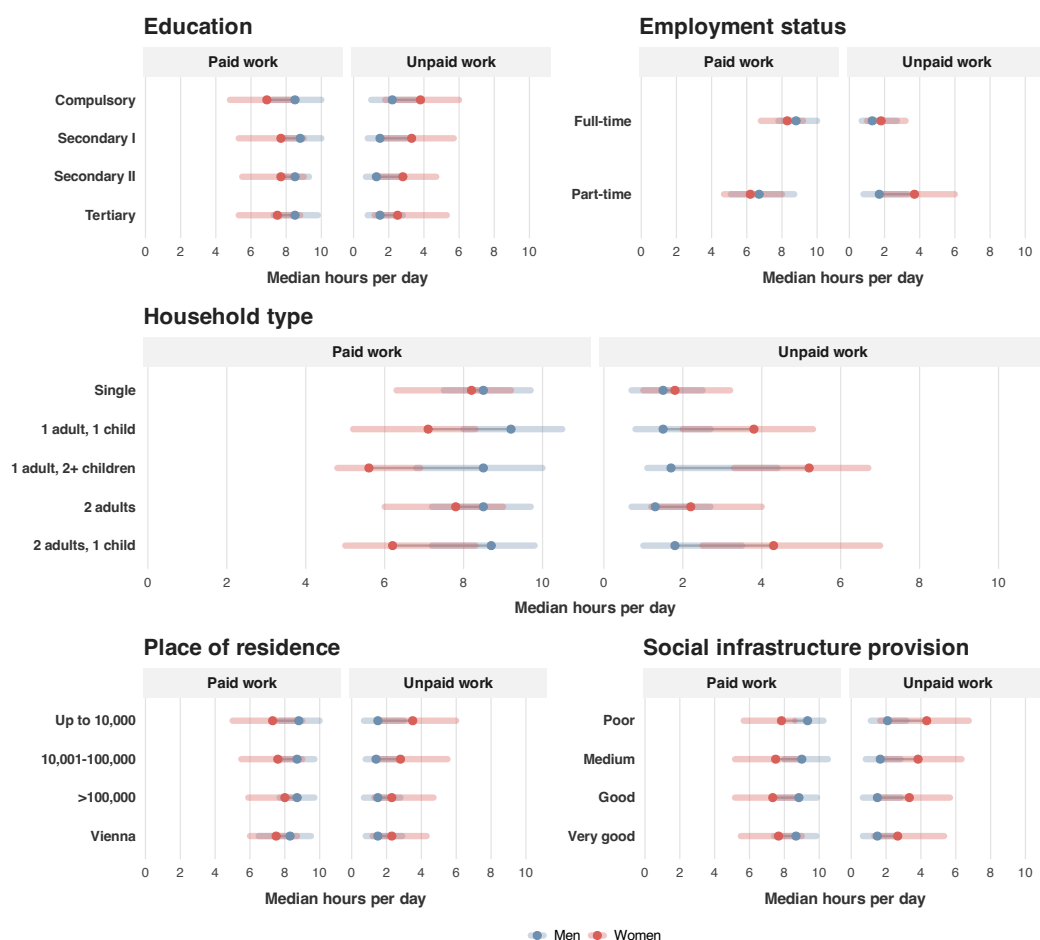
Strong urban infrastructure may save time and reduce the need for household self-provision but coexist with high housing expenditure. The social-infrastructure results consequently reveal a form of inequality that income statistics do not capture. The key question is not only how much money households retain, but what that income must purchase because services are unavailable collectively.

4.3 Time use: Gendered inequalities in paid and unpaid work

The third pillar examines how adults aged 21 to 64 allocate time between paid employment and unpaid care and household work. Unlike income measures, which generally treat the household as a combined unit, time-use data reveal differences between individual household members. Across the results in Figure 9, the most consistent finding is a pronounced gender gap in unpaid work. Women spend more time than men on household labor, childcare and the care of relatives. The

Gender gaps in paid and unpaid work

Each point shows the median number of hours per day. Thick horizontal segments indicate the interquartile range (Q1–Q3).



Source: Self-collected data from Statistics Austria's childcare statistics, Docfinder, the Austrian Medical Professions Handbook, the Federal Ministry of Social Affairs and Health, OpenStreetMap, data.gv.at, the Federal Ministry of Education, Google, and Austrian Time Use Survey 2021/2022.

Figure 9: Gender differences in paid and unpaid work across socioeconomic, household and spatial characteristics.

size of this difference varies with education, employment status, household composition and place, but it does not disappear in any of the groups examined.

Education changes the size, but not the direction, of the gender gap

Women perform more unpaid work than men at every educational level. Among men, the allocation of time between paid and unpaid work changes relatively little across educational groups. Among women, higher education is associated with somewhat more paid work and somewhat less unpaid work. The gender difference nevertheless persists among university-educated adults. Higher education may improve women's labor-market opportunities and increase the financial capacity of households to purchase childcare or domestic services, but it does not eliminate gendered responsibility for unpaid work. The result points to the limits of explanations based exclusively on human capital. Education affects the resources available to negotiate or outsource work, but the division of labor remains shaped by broader gender norms and institutional arrangements.

Part-time work has different implications for women and men

Employment status reveals an especially sharp contrast. Women working part time perform almost twice as much care work as women employed full time. Part-time employment among women therefore does not generally translate into a corresponding increase in leisure. Rather, the reduction in paid hours is largely absorbed by household and care responsibilities. Among part-time workers, women perform more than twice as much unpaid work as men. The findings indicate that men's reduced paid working time is more likely to translate into personal or leisure time, whereas women's reduced hours are more likely to be used for unpaid work.

This pattern has consequences beyond the daily time budget. Part-time employment lowers current earnings, career opportunities and future pension entitlements. When part-time work is combined with greater responsibility for unpaid care, it can increase women's long-term financial dependence and exposure to poverty. Time inequality and income inequality are therefore mutually reinforcing. The unequal division of care contributes to unequal employment trajectories, while unequal earnings affect households' ability to purchase substitutes for unpaid work.

Household formation intensifies gender specialization

Among single adults, women and men show comparatively small differences in the division between paid and unpaid work. The pattern changes once adults live in couple households. Women in couples perform, on average,

approximately 50 minutes more unpaid work per day than their male partners. The gap widens considerably with children. In couple households with one child under the age of 15, women spend more than four hours per day on care and household work, compared with less than two hours among men. At the same time, men perform almost two hours more paid work per day than women. With additional children, these differences become more pronounced. Women further reduce paid employment and increase unpaid work, while men extend their paid working time. A gender difference is also visible among single parents: single fathers spend more time in employment, while single mothers perform more care work.

Household composition is therefore not simply an additional demographic characteristic. The transition from single living to partnership and parenthood reorganizes the division of labor in a systematically gendered way. The presence of children increases the total volume of necessary work, but the additional workload is allocated differently to women and men.

Place of residence shapes women's unpaid work more strongly than men's

The territorial analysis shows that women in the smallest and most rural municipalities perform more than one additional hour of care work per day compared with women in Vienna. As municipality size increases, women's unpaid workload declines. Men's unpaid work, by contrast, remains comparatively stable across municipality-size categories. This result indicates that spatial context does not affect all household members in the same way. Rurality is associated with a more traditional and unequal division of unpaid work.

Several mechanisms may contribute to this pattern. Rural labor markets may provide fewer full-time employment opportunities for women, services may be further away or less compatible with working hours, and care may be more strongly organized through family networks. The descriptive analysis cannot isolate these mechanisms, but it demonstrates that time-use inequality has a clear spatial dimension.

Poor infrastructure is associated with substantially higher unpaid work among women

The strongest connection between the three pillars appears when time use is compared directly with infrastructure provision. Men's unpaid work remains relatively constant across infrastructure categories. Among women, however, the relationship is substantial: women in municipalities with poor infrastructure provision perform, on average, more than 1.5 additional hours of unpaid work per day compared with women in well-provided areas. This result provides empirical support for the central

proposition of the Re:sl:Ze framework. When public or collectively organized services are missing or difficult to reach, necessary care and provisioning activities do not disappear. They are more likely to be performed privately within households, and women absorb a disproportionate share of that additional work.

5 Discussion: From foundational provision to the privatization of everyday costs

This paper has been guided by the question:

How can foundational livability be empirically assessed through residual income, social infrastructure and time use, and what limitations and research needs emerge from the Austrian case?

By placing residual income, social infrastructure and time use within a common analytical framework, Re:sl:Ze makes visible the principal channels through which the costs of foundational provision can be redistributed. It thereby turns a broad theoretical proposition into an empirically grounded research agenda.

The findings suggest that the privatization of foundational provision should not be understood only as a formal change in ownership. It also involves shifts in the practical responsibility for satisfying essential needs. When collective provision is absent, difficult to reach, unaffordable or insufficiently compatible with everyday schedules, households must compensate. They may pay more for housing, mobility, childcare or other substitutes; spend additional time travelling and coordinating services, or perform more care and household work themselves. The effects can therefore appear in monetary budgets, time budgets and the organization of social reproduction.

This broader understanding is consistent with foundational economy scholarship, which distinguishes between market provision, public provision and the unpaid “core economy” of family and community. Bärnthaler et al. (2021) note that austerity and marketization can shift socially necessary work towards households, often without making that transfer visible as an economic cost. The Re:sl:Ze findings add an Austrian empirical perspective to this argument: the household is not simply the final consumer of foundational goods and services, but frequently also the provider.

5.1 Privatization as a redistribution of costs rather than their disappearance

The first answer suggested by the findings is that reductions or deficiencies in collective provision do not remove the costs of satisfying essential needs. They alter where those costs appear and who bears them. Residual income provides the clearest monetary expression of this process. The results show that necessary expenditure absorbs a much larger proportion of the income of low-income households than of high-income households. Among the lowest-income households, close to 60 per cent of income is devoted to housing, food, health, mobility and education, compared with around 20 per cent in the highest quintile. Among low-income tenants, only around 30 per cent remains after necessary expenditure.

These results are consistent with the wider foundational livability literature. Bassens et al. (2025) show that, across several Western European countries, low-income groups devote between half and three-fifths of total expenditure to a limited set of foundational essentials. They argue that residual-income differences do not correspond in any simple way to regional GDP or productivity and may extend well into middle-income groups during cost-of-living crises. The Austrian findings therefore should not be read as an isolated national pattern. They reflect a more general distinction between nominal income and the margin of comfort that remains after households have secured the necessities of everyday life.

Expenditure on housing, energy, transport, health or care is not merely the outcome of individual consumer choice. It depends on systems of provision: housing tenure structures, public-transport availability, energy infrastructures, service fees, spatial planning and the degree to which needs are satisfied collectively rather than through private purchasing power. Barbera and Jones (2020) describe the foundational economy as the economic infrastructure of social citizenship, combining private and collective forms of consumption. They emphasize that material and providential sectors have increasingly been exposed to privatization, outsourcing, marketisation and financialization, processes through which welfare responsibilities are reframed as matters for individual planning, assets and debt. From this perspective, higher private expenditure is not simply an unfortunate side effect. It may be the direct household-level expression of a political shift from collective entitlement towards market entitlement.

Similarly, it is argued that the historical movement from public ownership, public operation and regulation towards privatization, outsourcing and financialization has made private income more decisive for access to foundational goods and services (Bayliss et al., 2021). Market entitlement privileges private consumption and leaves low-income households more exposed when basic prices rise. Re:sl:Ze

helps identify the Austrian distributional structure through which such exposure would operate. Tenants, single parents, pensioner households and households with weak labor-market resources have comparatively little residual income with which to absorb additional costs.

5.2 Social infrastructure as the missing link between income and household self-provision

The second contribution concerns the central role of social infrastructure. The Re:sl:Ze findings demonstrate that income and expenditure cannot be interpreted independently of place. Municipalities differ not only in housing costs and wages, but in the availability and accessibility of healthcare, education, childcare, care and social services. This is important because the consequences of weak provision are not exhausted by service non-use. Where services are unavailable locally, households may travel to neighboring municipalities, depend on private vehicles, reorganize employment around opening hours, use informal networks or perform the work themselves.

The social infrastructure indicator shows that provision is particularly weak in elderly care and social services and that assessments deteriorate markedly when accessibility by public transport rather than by car is considered. Small municipalities have lower average provision, although substantial variation exists among municipalities of similar size. These patterns support Bassens et al.'s (2025) call to analyze foundational livability through the interaction of household resources, accessibility and time rather than through territorial averages alone. They argue that households in the same locality may experience radically different conditions depending on income, access to services and their ability to manage spatial constraints. Their distinction between foundational privilege and precarity is especially useful here. Privileged households can convert income into shorter travel times, private mobility and outsourced domestic labor, while precarious households are more likely to face long journeys, poor services and unpaid self-provision.

The Austrian findings also complicate simple urban-rural or prosperous-disadvantaged classifications. Higher residual income in a small municipality does not necessarily imply higher foundational livability. It may partly reflect owner occupation or low recorded housing expenditure while concealing additional mobility requirements and limited access to care. Conversely, lower residual income in an urban area may coexist with more extensive public transport, childcare and health provision.

This finding is directly relevant to the concept of privatization. When access to public or publicly regulated services is conditional on private mobility, the service may remain formally collective while part of its practical cost

has been privatized. Households provide the vehicle, fuel, travel time and coordination. Similarly, a childcare facility may exist, but limited hours may require parents to reduce paid employment or arrange additional informal care. The boundary between public and private provision is therefore shaped not only by ownership but by the actual conditions of use.

5.3 Time use reveals the intra-household distribution of privatized costs

The third and perhaps most distinctive answer to the research question concerns time. Residual income can show what a household retains financially, but it cannot show who performs the work required to sustain that household. The time-use findings demonstrate that the costs of insufficient provision are not only transferred between institutions and households. Rather, they are also distributed unequally among household members.

Across educational groups, employment arrangements and household types, Austrian women perform more unpaid care and household work than men. The difference becomes substantially larger in couple households and especially after the arrival of children. Women in part-time employment devote much of the time released from paid work to unpaid labor, whereas men's reduced working hours are more likely to generate additional discretionary time. Women in small municipalities perform more unpaid work than women in Vienna, and the difference between poorly and well-provided municipalities exceeds 1.5 hours per day.

These results strongly support the feminist critique of household-level foundational metrics. Bärnthaler et al. (2021) argue that residual income can obscure the "core economy" of self-organized care because it treats the household as a pooled monetary unit. They therefore call for time-use data to make visible the unequal distribution of reproductive work. Re:sl:Ze operationalizes precisely this argument by showing that household livability cannot be evaluated without examining the allocation of paid and unpaid work. The results are also consistent with Bassens et al.'s (2025) account of "buying time." Higher-income households can use money to outsource cleaning, childcare or care, while lower-income households depend more heavily on self-provision. These differences generate gendered inequalities in paid and unpaid labor.

The association between poor infrastructure and women's unpaid work is particularly important. It suggests that the privatization of provision is not gender-neutral. Where collective services are weak, household compensation appears to be disproportionately organized through women's time. The public cost may be reduced or displaced, but the necessary work is still performed. This also reveals a feedback loop between time and monetary inequality.

Greater unpaid care responsibility can lead women to reduce paid working hours. Part-time employment then lowers current earnings, career progression and future pension entitlements. Lower individual income can in turn weaken bargaining power within households and reduce the capacity to purchase services that would save time. The privatization of time burdens therefore produces longer-term financial consequences.

5.4 Public versus private provision: Ownership matters, but governance and access matter more

The results should not be interpreted as evidence that every private provider worsens household livability or that direct state provision is always sufficient. Foundational economy scholarship is more institutionally pluralist than a simple state-market binary suggests. Hansen (2022) notes that foundational provision may be delivered by public, non-profit, cooperative or private organizations. The central requirement is that providers follow certain social obligations, such as affordability and service quality. This is the rationale behind social licensing. The question is therefore not ownership alone, but whether governance arrangements protect use value and universal access (Bayliss et al., 2023).

Nevertheless, ownership and financing remain consequential because they shape institutional incentives. Foundational services generally require long-term investment, stable returns and continuity. Financialized business models prioritizing short-term extraction may conflict with these characteristics and can reduce service quality, worsen working conditions and increase debt. Bärnthaler et al. (2021) similarly trace the foundational economy approach to a critique of privatization, austerity and financialization, which underestimate long-term and spatially distant social costs. The Re:sl:Ze framework adds an important criterion for evaluating any system of provision: its consequences must be traced beyond provider-level performance and into households. A service may be financially efficient for a municipality or profitable for a private operator while generating travel time, user fees or unpaid care work elsewhere. Conversely, a public investment may appear costly in budgetary terms but increase household residual income, reduce time poverty and support employment.

The relevant evaluation question is therefore not simply whether provision is public or private, but:

- Who finances the service?
- Who can access it in practice?
- How much household expenditure does it replace or create?

- How much travel and coordination does it require?
- Does it reduce or increase unpaid work?
- How are these effects distributed by income, gender, household type and place?

This broader accounting would make visible costs that are otherwise externalized to households.

6 From descriptive patterns to a research agenda on foundational livability

The Re:sl:Ze findings should not be read as a direct empirical test of whether the withdrawal, marketization or reorganization of public provision has caused particular monetary or temporal burdens in Austrian households. The analyses are descriptive, the three pillars draw on different datasets, and changes in provision are not followed longitudinally for the same households. The project therefore cannot determine whether a specific infrastructure gap caused higher expenditure, whether a service closure increased women's unpaid work or whether stronger collective provision reduced household emissions.

Its contribution is instead to establish the empirical and conceptual foundations for such research. The results identify dimensions that foundational economy theory suggests should be connected, but which are rarely observed together: the income remaining after essential expenditure, the availability and accessibility of foundational services, and the distribution of paid and unpaid work. Re:sl:Ze thus provides a first analysis of the Austrian conditions under which the privatization of foundational responsibility could occur and formulates a research program for examining these processes more directly.

This agenda is timely because foundational economy scholarship has developed a substantial theoretical account of how everyday wellbeing depends on collective systems of provision, while empirical evidence on the interactions between household money, accessibility and time remains comparatively fragmented. Bassens et al. (2025) explicitly identify the organization of official statistics as an obstacle to studying foundational privilege and precarity across time and space. They call for data capable of analyzing how inter- and intra-household inequalities arise through the "dialectics of income, time and space" (p. 18). Re:sl:Ze advances this agenda by showing that these dimensions can already be operationalized in Austria, even though their direct relationships require further investigation.

6.1 Studying cumulative configurations of foundational advantage and precarity

A first research priority is to move beyond separate measures of income poverty, infrastructure deprivation and time poverty towards an analysis of their cumulative configurations. The present findings show that these dimensions do not necessarily follow the same geography. Some households face high housing costs but benefit from dense infrastructure. Others retain more income because of lower housing expenditure but depend on private vehicles or household self-provision. Still others may experience high essential costs, weak services and substantial unpaid workloads simultaneously.

These combinations resemble what Bassens et al. (2025) conceptualize as the relational ideal types of foundational privilege and foundational precarity. Foundational privilege combines high residual income, good services, short travel times, mobility choice and the capacity to outsource household tasks. Precarity combines low residual income, poor or distant services, transport disadvantage and the performance of invisible reproductive labor within households. The concept is relational because the ability of more affluent households to purchase mobility, care and convenience can coexist with, and sometimes depend upon, the poorly paid or unpaid labor of others.

Future research should identify how such configurations are distributed across Austrian household types and territories. Foundational livability is situated at the intersection of household resources and spatial systems rather than being a simple characteristic of a region. The relevant unit of analysis is therefore neither the household nor the territory alone, but their interaction. Such an approach would avoid assuming that all rural, urban, low-income or tenant households experience the same conditions. Longitudinal data would be particularly valuable. The stronger claim that costs are being transferred requires observing change. For example, what happens to expenditure, employment and unpaid work after a childcare facility closes, public-transport frequency declines, fees increase or a new service becomes available. Quasi-experimental designs could compare affected and unaffected municipalities before and after such changes.

6.2 Connecting material conditions with subjective livability and political discontent

A second research direction concerns the relationship between foundational conditions and political attitudes and subjective wellbeing. Re:sl:Ze does not include indicators of trust, satisfaction, voting or political participation. It therefore cannot establish whether households facing low residual income, inaccessible services or time pressure

are more politically dissatisfied. The findings nevertheless identify material conditions that the emerging literature suggests may shape how citizens evaluate institutions and places. Bassens et al. (2025) argue that political discontent may arise not only from absolute deprivation, but from the experience of “falling below” socially expected standards of livability. In this account, deteriorating provision and the sense that everyday systems no longer function can generate resentment, disengagement or progressive mobilization. Their research agenda therefore connects foundational practices with place-based cultures and politics, including the emotional and embodied experience of deteriorating collective provision.

For Austria, future studies could link the Re:sl:Ze indicators with survey data on institutional trust, satisfaction with public services, perceptions of regional neglect, electoral participation and party preference. The analysis should distinguish objective provision from subjective experience. A household may have a service within a technically acceptable distance but experience it as inaccessible because of waiting lists, opening hours, cost or a lack of public transport. Conversely, residents may evaluate provision positively despite relatively low facility density where informal networks function effectively.

Qualitative research is needed alongside statistical analysis. Interviews and household case studies could examine when service gaps are interpreted as individual inconvenience, local disadvantage or institutional failure. They could also reveal why similar material conditions generate different political responses. This line of inquiry would broaden the study of regional polarization. Rather than explaining discontent mainly through employment loss, productivity or aggregate economic decline, it would investigate whether the everyday experience of housing pressure, inaccessible care, weak mobility and time scarcity contributes to the perception that collective institutions no longer provide security.

6.3 Integrating ecological impacts and eco-social distribution

A third major extension concerns ecological pressures. Re:sl:Ze does not measure household emissions, energy use, land consumption or the environmental footprint of different service arrangements. The present results nevertheless identify relevant mechanisms, especially where access to infrastructure depends on private cars. Transport research shows that car-dependent land-use patterns produce both environmental impacts and forms of social exclusion (Mattioli et al., 2017). Households may experience either car deprivation or forced car ownership, with the latter imposing significant financial costs on those who cannot realistically reach essential activities without a vehicle (Mattioli, 2014). The ecological and social effects are therefore interconnected: the same spatial structure

that increases emissions may also reduce residual income and constrain households without cars. Future research should estimate the emissions and resource implications of different foundational configurations. Relevant comparisons include collective and individual transport, centralized and decentralized service locations, institutional and household care, and efficient housing versus poorly insulated private rental housing. Such analysis should use life-cycle and consumption-based measures where possible, since environmental burdens may be shifted geographically as well as institutionally.

At the same time, collective provision cannot automatically be assumed to be environmentally superior. Hansen (2022) argues that ecological sustainability remains insufficiently developed within foundational economy thinking. Transforming foundational systems requires coordinated changes in technologies, organizational structures, institutions and user practices; environmental clauses attached to providers are unlikely to be sufficient by themselves. Eco-social policy research offers a complementary perspective by examining whether environmental interventions distribute costs and benefits fairly. Climate policies can have markedly different distributional effects and environmental effectiveness, efficiency and equity depend on the design of policy packages and compensation mechanisms (Vona, 2023). A Re:sl:Ze-based ecological agenda should therefore ask not only whether an intervention reduces emissions, but also whether it raises necessary expenditure or excludes

households that lack the resources required to adapt. This is particularly important for measures that rely on private investment. Policies promoting electric vehicles, home insulation or household energy technologies may disproportionately benefit owner-occupiers with savings and access to credit, while tenants and low-income households remain exposed to high energy or mobility costs.

Taken together, these research directions point toward a broader understanding of foundational livability as the capacity of households to meet everyday needs without being exposed to excessive financial costs, inaccessible services, unequal time burdens or environmentally unsustainable forms of private provision. The central contribution of Re:sl:Ze is to show that these pressures must be examined jointly rather than as separate questions of income, infrastructure provision, and gender. A more complete empirical agenda would therefore combine household-level and spatial data, track changes over time, and assess both objective conditions and lived experience. Such research could provide a stronger basis for policies that do not merely compensate households for individual disadvantage but reshape the collective systems through which essential needs are met. In this sense, Re:sl:Ze is not an endpoint, but a framework for investigating how public provision, household resources, time and environmental constraints interact in the production of everyday security and inequality.

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