

# 3. Next steps: Towards an integrated policy approach

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This chapter begins by examining how the built environment is reflected in OECD countries' national well-being frameworks and indicators. The chapter then applies a well-being lens aimed at *refocusing, redesigning, realigning and reconnecting (4Rs)* built environment policies. Well-being evidence can support policy makers in *refocusing* built environment policies towards the outcomes that matter most to people and help *redesign* policy content from a more multidimensional perspective. A well-being lens can also help *realign* the interests of different stakeholders and *reconnect* government with the communities they serve as well as the private sector actors who play a major role in shaping the built environment. Built environment policy examples such as New Zealand's housing and urban policies for well-being and Ireland's sustainable mobility strategy are introduced to highlight how these *4Rs* can be instrumental in promoting an integrated policy approach for the built environment, well-being and sustainability.

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### 3.1. Principles of a well-being policy approach applied to the built environment

**This section examines how OECD countries' national well-being frameworks and indicators try to measure and assess the built environment.** Countries have selected a variety of indicators to measure the quality of the built environment, and they are increasingly looking at perceptions of whether people are satisfied with their surrounding built environment. Next, the chapter will discuss how the well-being lens of the “four R’s” (*refocus, redesign, realign* and *reconnect*) (OECD, 2021<sup>[1]</sup>) can help *refocus* built environment policies on the topics of well-being and sustainability, *redesign* them with multidimensional well-being evidence, *realign* a wide range of stakeholders' interests and *reconnect* with the people, the private sector in particular, to better implement built environment policies for well-being and sustainability. This will be helpful in showing how to harness the benefits of an integrated approach to well-being and the built environment across multiple policy sectors.

#### **3.1.1. The built environment features in several national well-being frameworks and indicators**

**OECD countries are increasingly developing well-being metrics and trying to employ them in their policy-making processes.** More than two-thirds of OECD countries have developed national frameworks, development plans or surveys with a well-being focus (OECD, 2023<sup>[2]</sup>). Well-being indicators are also being emphasised in various stages of policy making and implementation. For example, in some cases, well-being indicators are being integrated into budget processes or national planning and performance frameworks; some governments are using legislation to orient specific government processes towards a more well-being and sustainability-based approach, and some are creating new institutions for policy coordination or government posts responsible for well-being (OECD, 2023<sup>[2]</sup>). These well-being frameworks and indicators are often developed by countries to overcome government silos and to encourage more collaboration across different government agencies.

**Using well-being frameworks and indicators allows government officials to explicitly assess the social and environmental impacts of policy decisions in a holistic and integrated way.** The benefit of applying a well-being lens to policy decisions is that it makes it possible to consider in a systematic way the various effects of those decisions on people's lives, now and in the future. For example, having well-being indicators in consideration when planning for a long-term infrastructure project will enable policy makers to identify possible social and environmental policy outcomes, and it will be helpful in redirecting the trajectory of built environment policies in a sustainable way.

**Many countries have embedded distinct aspects of the built environment in their well-being frameworks or indicators** (Table 3.1). Well-being frameworks or initiatives are generally structured so that there are domains or dimensions, which are broad categories of well-being that are of particular interest to the relevant country. Well-being indicators, which are more specific statistics used to measure the state of well-being, are included under each domain. The most frequently covered/measured topics in national well-being frameworks related to the built environment are housing and transport. Countries generally recognise that both the quality and affordability of housing matter for people's well-being. Several indicators measuring housing quality (e.g. *very poor standard of housing* (Austria), *quality of housing* (Iceland, New Zealand), *living space per capita* (Korea)), as well as the affordability and availability of dwellings (e.g. *housing cost* (New Zealand), *home-ownership rate* (Korea), *at risk of poverty rate after rent and mortgage interest* (Ireland), *housing cost overburden* (Austria, Iceland), or *ratio of rental costs to net household income* (Germany)), can be found among countries' well-being indicators. As for transport, a number of countries have included access to essential services (such as education, health and recreational facilities) as a key indicator of mobility (e.g. *timely access to primary care provider* (Canada), *travel time to educational, service and cultural facilities* (Germany), *average distance to everyday services* (Ireland)), in a move away from measuring only the volume of transport. Other areas related to the built environment often covered by well-being frameworks are environment and safety. Examples include people's exposure

to air, water or noise pollution in living environments (e.g. *urban exposure to particulate matter* (Netherlands)) as well as access to green space (e.g. *access to the natural environment* (New Zealand)). Several countries have also included traffic safety (e.g. *persons killed or injured on roads* (Ireland), *road casualty rate* (Korea), *road toll* (New Zealand)) and whether people felt safe walking in their neighbourhoods (e.g. *walkability index* (Canada), *feeling safe walking in the neighbourhood after dark* (Iceland, Korea, Netherlands, UK)) in their set of well-being indicators.

**Subjective well-being indicators related to the built environment have been incorporated in numerous national well-being frameworks and indicators.** Subjective indicators such as people's satisfaction about housing, commuting, neighbourhood safety and access to green space, are often observed, alongside more traditional objective indicators on the built environment. For example, some countries measure people's satisfaction about the living environment (e.g. *satisfaction rates on air and water quality, soil environment and noise level* (Korea), *subjective environmental stress in the living environment* (Austria)). There is also an increasing tendency to take into consideration inequalities embedded in the built environment and try to measure the progress in removing these by providing disaggregated evidence for different population groups. For example, information by gender is presented when considering the indicator *feeling safe when walking alone at night*.

**Table 3.1. Examples of built environment-related indicators in national well-being initiatives, selected countries**

Detailed descriptions of each initiative can be found in Annex 3.A

Country	Measurement initiative/ indicator set	Leading agency	Key indicators (domains) relevant to the built environment
Australia	Measuring What Matters: Australia's First Wellbeing Framework (2023)	Department of the Treasury	<ul style="list-style-type: none"> <li>• (Healthy) equitable access to quality health and care services</li> <li>• (Secure) housing serviceability, homelessness, feeling of safety</li> <li>• (Prosperous) digital preparedness</li> <li>• (Sustainable) protected areas, resource use and water generation, climate resilience</li> </ul>
Austria	How's Austria 2021	Statistics Austria	<ul style="list-style-type: none"> <li>• (Quality of life) housing cost overburden, very poor standard of housing, subjective environmental stress in the living environment</li> <li>• (Environment) energy consumption of transport, transport performance of road freight traffic, fuel consumption of private cars, use of public transport, and greenhouse gas emissions from transport</li> </ul>
Canada	Measuring What Matters: Toward a Quality of Life Strategy for Canada (2021)	Department of Finance	<ul style="list-style-type: none"> <li>• (Prosperity) housing needs, homelessness</li> <li>• (Environment) clean drinking water, satisfaction with local environment, walkability index, access to public transit, waste management</li> <li>• (Health, Society and Good Governance) timely access to primary care provider, sense of belonging to local community, accessible environment, perceptions of neighbourhood safety after dark</li> </ul>
Germany	Government Report on Well-being in Germany (2017)	Federal Chancellery and the Ministry of Economic Affairs and Energy	<ul style="list-style-type: none"> <li>• (Our Surroundings) ratio of rental costs to net household income, travel time to educational, service and cultural facilities, broadband access</li> </ul>
Iceland	Indicators for Measuring Well-being (2019)	Prime Minister's Committee on Indicators for measuring Well-being	<ul style="list-style-type: none"> <li>• (Housing) housing cost overburden, quality of housing</li> <li>• (Land Use) progress in land reclamation, protected areas</li> <li>• (Waste and Recycling) quantity of municipal solid waste, recycling rate of municipal solid waste,</li> <li>• (Security) feeling safe after dark</li> </ul>
Ireland	Understanding Life in Ireland: The Well-being Framework (2022)	Department of the Taoiseach	<ul style="list-style-type: none"> <li>• (Housing and the built environment) new dwelling completions, number of domestic dwellings with A or B energy rating, at risk of poverty rate after rent and mortgage interest, average distance to everyday services</li> </ul>

Country	Measurement initiative/ indicator set	Leading agency	Key indicators (domains) relevant to the built environment
			<ul style="list-style-type: none"> <li>• (Safety and Security) persons killed or injured on roads, population who worry they could be a victim of a crime</li> </ul>
Korea	National Quality of Life Index (2022)	Statistics Korea (Kostat)	<ul style="list-style-type: none"> <li>• (Housing) home-ownership rate, rent to income ratio, living space per capita, dwellings without basic facilities (i.e. kitchen, toilet/bathroom), commuting time to workplace, housing environment satisfaction</li> <li>• (Environment) public park size per person in a city, water supply coverage rate of rural area, satisfaction rates on air quality, water quality, soil environment, noise level and green environment</li> <li>• (Safety) feeling safe walking alone at night, road casualty rate, safety accident-induced child death rate</li> </ul>
Netherlands	Monitor of Well-being & the Sustainable Development Goals (2020)	Statistics Netherlands (CBS)	<ul style="list-style-type: none"> <li>• (Well-being trend) time lost due to traffic congestion and delays, housing quality, satisfaction with housing, often feeling unsafe in the neighbourhood, quality of inland bathing waters, urban exposure to particulate matter</li> <li>• (Distribution of well-being) satisfaction with commuter travelling time, quality of housing, satisfaction with housing, feeling unsafe in the neighbourhood, experience pollution in own neighbourhood</li> </ul>
New Zealand	Living Standards Framework (LSF) (2022)	New Zealand Treasury	<ul style="list-style-type: none"> <li>• (Housing) household crowding, housing cost (deposit affordability, mortgage affordability, rent affordability, share of income), housing quality</li> <li>• (Environmental amenity) access to the natural environment, drinking water management</li> <li>• (Safety) feeling safe, road toll</li> <li>• (Financial &amp; physical) total net fixed assets, gross fixed capital formation</li> </ul>
United Kingdom	Quality of Life in the UK (2023)	Office for National Statistics (ONS)	<ul style="list-style-type: none"> <li>• (Where we live) incidence of personal crime, feeling safe after dark, belonging to neighbourhood, digital exclusion, satisfaction with accommodation</li> </ul>

Source: Rearranged from relevant agencies' websites ([Australia \(https://treasury.gov.au/sites/default/files/2023-07/measuring-what-matters-statement020230721\\_0.pdf\)](https://treasury.gov.au/sites/default/files/2023-07/measuring-what-matters-statement020230721_0.pdf), Austria ([https://www.statistik.at/fileadmin/publications/Wie\\_geht\\_s\\_OEsterreich\\_2021.pdf](https://www.statistik.at/fileadmin/publications/Wie_geht_s_OEsterreich_2021.pdf)), Canada (<https://www.canada.ca/en/department-finance/services/publications/measuring-what-matters-toward-quality-life-strategy-canada.html>), Germany (<https://www.gut-leben-in-deutschland.de/downloads/Government-Report-on-Wellbeing-in-Germany.pdf>), Iceland (<https://www.government.is/lisalib/getfile.aspx?itemid=fc981010-da09-11e9-944d-005056bc4d74>), Ireland (<https://www.gov.ie/pdf/?file=https://assets.gov.ie/226077/8b4c5045-c259-498d-8d03-7feadd128726.pdf#page=null>), Korea ([https://sri.kostat.go.kr/board.es?mid=a90401000000&bid=11477&list\\_no=423793&act=view&mainXml=Y](https://sri.kostat.go.kr/board.es?mid=a90401000000&bid=11477&list_no=423793&act=view&mainXml=Y)), Netherlands (<https://longreads.cbs.nl/monitor-of-well-being-and-sdgs-2020/>), New Zealand (<https://www.treasury.govt.nz/publications/tp/living-standards-framework-dashboard-april-2022#executive-summary>), United Kingdom (<https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/ukmeasuresofnationalwellbeing/dashboard>).

**Despite the large use of built environment-related well-being indicators, there is still a lack of harmonisation on definitions or measurement across countries.** Current measures of the built environment included in national well-being initiatives do share some commonalities, as they often capture elements of housing, neighbourhood, environment and safety. Many of the underlying indicators for these dimensions have often been adapted to national contexts (e.g. timely access to primary care provider (Canada), commuting time to workplace (Korea)). Broadly speaking, however, many of the national well-being indicators on the built environment use different definitions or measurement methods. Many factors can contribute to these variations. Some may arise because well-being dashboards are often developed through a process of extensive consultation with the public and with national experts – which in turn can mean that context-specific and locally developed measures may feature prominently. In other cases, there may be a lack of internationally agreed methods and guidance. Further efforts to internationally harmonise some of the key indicators relevant to the built environment could serve to facilitate benchmarking and developing the evidence base around *what works*, for example in relation to housing and transport accessibility policies.

**Well-being indicator dashboards are usually collated by National Statistical Offices, Finance Ministries or Prime Minister's Offices, but all relevant line departments should get involved.** Well-

being evidence is often used by National Statistical Offices to monitor progress on living conditions, inclusion and sustainability; by the Prime Minister's Office in the context of strategic priority-setting; or by Finance Ministries in charge of economic policies and budgeting decisions. However, line ministries that are directly related to policies concerning the built environment, such as ministries of housing, transport, infrastructure, energy, health and welfare, all need to be involved in the integral processes of designing and maintaining relevant well-being indicators. For example, the New Zealand Treasury states that the Living Standards Framework is not intended to provide the depth of well-being evidence necessary for sector policy analysis and calls for other agencies and stakeholders to develop their own well-being datasets specific to their needs (The Treasury, 2023<sup>[3]</sup>). Inter-governmental consultations are often already in place, but since the level of understanding on well-being may vary across the government, efforts should be made to ensure that civil servants of different ministries dealing with the built environment fully understand what difference well-being can make in the way their tasks are carried out.

### ***3.1.2. A well-being approach for the built environment: 4Rs (Refocus, Redesign, Realign, Reconnect)***

**Built environment policies are multidimensional in nature and feature across many policy departments, making a well-being approach particularly relevant.** As discussed in the previous chapter and section, the built environment shapes people's well-being in many different ways. In addition, tools and solutions used by governments and private actors to support the built environment span many policy programmes and sectors. In many countries it is often difficult to align and connect a wide range of the stakeholders involved in designing, building, maintaining and ultimately disposing of or recycling the different components of the built environment. Against this backdrop, applying the main principles of well-being policy practices – *refocus*, *redesign*, *realign* and *reconnect* (OECD, 2021<sup>[1]</sup>) (Box 3.1) – to the built environment would be meaningful. The prioritisation of well-being and sustainability at the core of built environment policy objectives will *refocus* the attention of public agencies towards outcomes that matter most to people. Multidimensional well-being evidence can be used to identify policy issues that need to be addressed in the context of the built environment and to *redesign* policies towards well-being objectives. The realignment of government objectives can help overcome government silos and facilitate collaboration between different government agencies responsible for built environment policies. Finally, *reconnecting* the government with the private sector and civil society underpins the common understanding of well-being objectives and policies and lays the ground for effective and collaborative implementation of built environment policies. The rest of this section discusses the application of the 4Rs approach to the built environment in greater detail.

### Box 3.1. Using a well-being lens to shape a more comprehensive and balanced approach to policy strategy, design and implementation

- **Refocus** – firmly focusing government action on what matters most to the well-being of people and society, building on evidence about both current and future well-being outcomes, as well as about inequality of opportunity across all dimensions of people’s lives
- **Redesign** – designing the content and delivery of policy in a coherent and integrated way that systematically considers potential impacts across multiple well-being objectives, inclusion and sustainability, rather than focusing on a single (or very narrow range of) objective(s) “here and now” independently of others
- **Realign** – aligning the system of government such that it is better able to collaboratively work towards societal priorities, by shifting the focus from narrower outputs of individual departments towards shared outcome-based objectives
- **Reconnect** – strengthening the connections between government, the private sector and civil society based on a joint understanding of what well-being means and how it can be improved.

Source: (OECD, 2021<sup>[1]</sup>), *COVID-19 and Well-being: Life in the Pandemic*, OECD Publishing, Paris, <https://doi.org/10.1787/1e1ecb53-en>.

#### 3.1.1. Refocusing the built environment on well-being

**Well-being evidence can support policy makers in refocusing built environment policies towards the outcomes that matter most to people.** Many dimensions of the well-being framework, especially those related to inclusion and equity, subjective well-being, social connectedness and environmental quality/natural capital, have often been overlooked in the design of the built environment. For example, Kimbur (2020<sup>[4]</sup>) illustrates how housing policies focused merely on material and utility aspects may miss important aspects of people’s well-being, such as inclusion and equity. A housing policy could, for instance, have successfully produced its target number of housing units, with good physical conditions, adjacent green areas, with affordable prices. However, if the system for securing tenants’ rights is inadequate, the household may be in an insecure position against the landlord. Some of the statistical evidence presented in the previous chapters also signals that **the built environment is not on a positive trajectory in terms of well-being and sustainability and that the gaps are widening, calling for greater policy attention and refocusing.** According to the *OECD Risks that Matter* survey, more than half of respondents in OECD countries report that they are concerned about finding and maintaining adequate housing in the short or long term. Having a well-being lens can also provide insights on how the built environment can catalyse inequalities. For example, over 80% of the population in the OECD’s largest cities have convenient access to public transport. However, the fact that access varies widely across and within countries is masked, as in some countries such as Mexico, Colombia and Chile, the gap is above 80 percentage points between the cities with the best access and those with the worst access. Another example is overcrowding: in OECD countries, the overcrowding rate stands just above 10% on average. For households in the lowest income quintile, however, the rate is 16%.

**Refocusing policies for the built environment on well-being and sustainability can also contribute to addressing current well-being concerns, promoting equal opportunities and improving well-being outcomes simultaneously (“triple win channels”)** (OECD, 2021<sup>[1]</sup>). The creation of sustainable, inclusive and high-quality jobs in the built environment sector illustrates an example of one such channel. Job creation in the built environment can be promoted in traditional sectors, such as the construction industry and property management, but also in sectors that may have increased importance in addressing issues of climate change and social inclusion, such as energy-efficient buildings, green transport and



infrastructure, the new mobility sector and social housing. Another example could be fostering child and youth well-being in the built environment, in the context of building healthier and safer educational facilities and neighbourhoods. Finally, Korea's Housing Guarantee program (Box 3.2) demonstrates how refocusing on housing affordability can help well-being of both home buyers and vulnerable renters.

### Box 3.2. Refocusing on housing affordability: Korea's Housing Guarantee program

- **Amid the rapid economic growth and urbanisation of the 1970-90s, the Korean government had to accelerate the supply of housing to meet the challenges of housing affordability.** The share of urban population in Korea increased from 41.1% in 1970 to 57.2% in 1980, and Seoul's housing prices more than doubled between 1981 to 1990. A five-year plan to construct 2 million units of new housing was carried out from 1988 to 1992, developing new towns adjacent to Seoul. The National Housing Fund was launched to facilitate financing for the housing construction comprehensive plan in 1981, providing financial support for 3 million units of housing from 1980 to 2000, which comprised 36.3% of total housing construction in Korea (Korea Housing & Urban Guarantee Corporation, 2019<sup>[5]</sup>; Kim, 2022<sup>[6]</sup>).
- **However, protecting homebuyers became a primary concern while sustaining the housing supply.** The 2008-09 global financial crisis brought many housing projects to a halt, and financial institutions faced substantial losses. Expanding the safety buffer for housing buyers and renters became increasingly important while boosting affordable housing supply. This led to the introduction of the National Housing and Urban Guarantee Fund (NHUF) in 2015 and the establishment of the Korea Housing & Urban Guarantee Corporation (HUG), a dedicated public guarantor managing the NHUF.
- **Korea refocused on housing affordability recently, making it one of its top priorities of housing policy.** The Ministry of Land, Infrastructure and Transport (MOLIT) has stated that its key policy objective is providing stable housing for all people, focusing on low- and middle-income households, and that "housing will be affordable for those who wish to have their own, and secure for those who wish to rent" (MOLIT, 2022<sup>[7]</sup>). Despite the accumulation of significant housing stock in Korea, housing instability for low-income households has continued, with the homeownership rate for high-income households at 73.5% against 47.5% for low-income households in 2017. In this context, the Korean government strives to strengthen the provision of housing guarantees to renters, home buyers as well as housing developers, in addition to continuing to expand the public rental housing supply and extending housing support to the young, the elderly, newly-weds and low-income households. These guarantees include:
  - **Housing guarantees to protect home buyers.** Korea has a "*pre-sale housing system*", which allows developers to use the housing purchase payment made by home buyers, with nearly 80% of the payment made in advance, to fund housing development projects. Homebuyers can buy houses at a lower cost, and constructors can benefit from lower financing costs and reduced risk of unsold stocks after the 2-3 years of construction period (Choi et al., 2020<sup>[8]</sup>). However, a delay in the housing project or a bankruptcy of the developer could cause a financial blow to the home buyers and abandonment of the project site. With 70-80% of the household assets in Korea being "houses", home buyers can be hit hard by the constructor's defaults. HUG provides guarantees to constructors following a thorough risk assessment, and constructors can only sign-up potential home buyers afterwards. If a guarantee incident incurs due to the insolvency of the constructor, HUG

refunds the payments to home buyers (if more than 2/3 of homebuyers ask for refund) or selects a new constructor to complete the construction (if construction is more than 80% complete).

- **Vulnerable renters are also protected from volatility of the housing market.** In particular, tenants can receive guarantees for *Jeonse* deposit return. *Jeonse* (i.e. lump-sum rental deposit) emerged during the period of high interest rates and rising housing prices when the landlord could invest the large upfront deposit to generate a return equivalent to rent, and the tenants did not have to pay monthly rent after making the deposit payment. This asset-based lease has been the dominant rental lease in the Korean housing market (OECD, 2018<sup>[9]</sup>). However, financial difficulties of the landlord may lead to the failure of the deposit return at the end of lease agreement. Thus, HUG, under some conditions, guarantees the return of the deposit to the renter. HUG also makes investments in rental REITs (Real Estate Investment Trusts), which in turn provide rental housing. HUG-supported rental REITs have a 10-year mandatory rental period, which gives tenure stability to households while renters can choose to leave before the end of the rental period. While the initial rent itself is set at 95% or less of the market price (85% or less for vulnerable households), there is 5% limit per annum on the increase of rent.

Source: (Choi et al., 2020<sup>[8]</sup>), “2019/20 KSP Policy Consultation Report”; (Korea Housing & Urban Guarantee Corporation, 2019<sup>[5]</sup>), “Policies to Provide Affordable Houses in Korea: History & Future”; (Kim, 2022<sup>[6]</sup>), “Urbanization, Quality of Life, and Affordable Housing”, <https://pennur.upenn.edu/events/kyung-hwan-kim>; (MOLIT, 2022<sup>[7]</sup>), Ministry of Land, Infrastructure and Transport, Minister’s Message, [https://www.molit.go.kr/english/USR/WPGE0201/m\\_28266/LST.jsp](https://www.molit.go.kr/english/USR/WPGE0201/m_28266/LST.jsp); (OECD, 2018<sup>[9]</sup>), *Housing Dynamics in Korea: Building Inclusive and Smart Cities*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264298880-en>.

### *Redesigning built environment policies to promote well-being, inclusion and sustainability*

#### **Well-being evidence can also help in redesigning policy content related to the built environment.**

The drivers of people’s well-being during the entire policy cycle for the built environment need to be disentangled in order to redesign built environment policies from a more multidimensional perspective. This implies the development of a well-being evidence base articulating the inter-linkages between the built environment outcomes and both the policy levers and the economic, social and environmental factors that drive them. Planners and policy makers are asked to shape better places for better lives but may often lack systematic knowledge both on what better places are and on how to shape these places, and well-being evidence may shed light on the multiple ways through which the built environment contributes to people’s quality of life (Mouratidis, 2021<sup>[10]</sup>). For example, (OECD, 2021<sup>[11]</sup>) documented how taxation, spending, and final policy related to housing, as well as rent regulation, building regulation, land use and environmental urban policy have effects that cut across multiple dimensions of affordability, mobility, economic resilience, the local environment and greenhouse gas emissions. Multidimensional well-being evidence can help assess possible synergies, trade-offs and unintended consequences that these different policies related to the built environment may generate. It will also help to address inequalities between population groups and to sustain physical capital for future generations.

**Redesigning with well-being evidence can be done during various stages of developing built environment policy.** Investments made in the built environment, including infrastructure investments, tend to be large-scale, and extensive sunk costs could be generated if the course is diverted after initial investments have been made. Thus, multidimensional well-being impact assessments for new built environment projects need to be done ex ante, rather than ex post. Italy’s case presents an example (Box 3.3) of having an evaluation score that includes economic, environmental, social and institutional

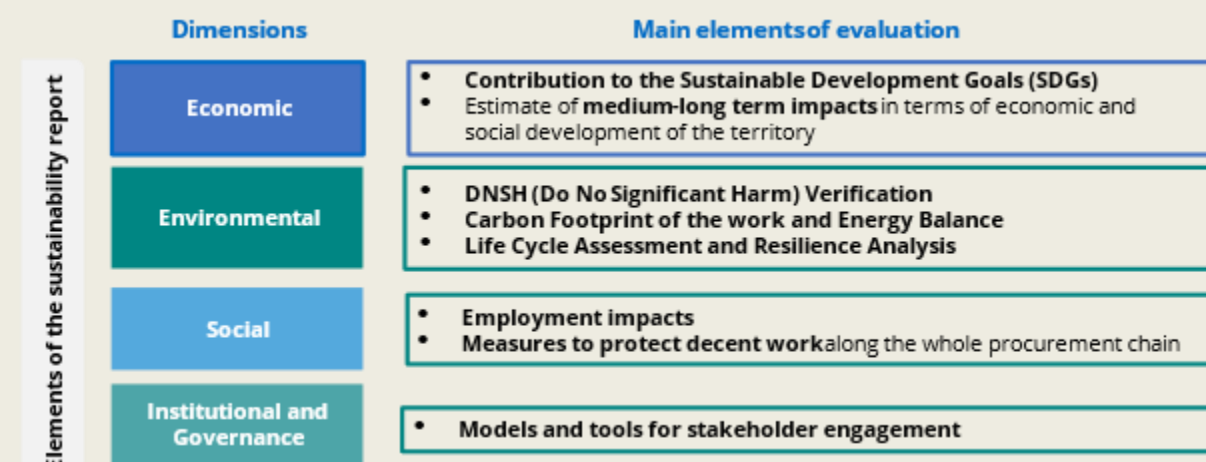


dimensions for the feasibility assessment of large-scale public works. Another example is Infrastructure Canada (INFC), which has been incorporating a gender-based analysis plus process (GBA Plus) in many of its infrastructure programmes and policies. Reporting on the employment and/or procurement opportunities for at least three Community Employment Benefits (CBE) groups (e.g. women, persons with disabilities, youth, Indigenous peoples) is required for projects worth over CAD 10-25 million under the Investing in Canada Infrastructure Program (ICIP) (Infrastructure Canada, 2022<sup>[12]</sup>). However, for the existing stock of the built environment, it is equally important to consider through ex-post assessments how its management or redesigning can be altered to ensure people's well-being and sustainability. For example, urban regeneration projects should address the inter-connected policy challenges revamping projects may generate that impact people's lives, such as gentrification.

### Box 3.3. Redesigning with ex-ante assessments of sustainability: The experience of Italy

In July 2021, new **Guidelines for the Technical and Economic Feasibility Project of Public Works** were issued by the Italian Ministry for Sustainable Infrastructures and Mobility (Mims), which renewed focus on the design of sustainable and resilient infrastructures and mobility networks. These guidelines include a Sustainability Report of investments as a **new ex-ante analysis document**. This report is based on a Sustainable Infrastructure and Mobility Score (SIMS), comprised of four dimensions of impacts: 1) economic and financial, 2) environmental, 3) social and 4) institutional and governance (Figure 3.1). This report is used during screening as part of a scoring methodology intended to determine the priorities for works to be funded. In addition to the cost-benefit analysis, it enables the assessment of impacts on the environment, accessibility, employment as well as concerning consistency with programme goals and mechanisms for involving stakeholders and citizens.

Figure 3.1. Dimensions for Sustainable Infrastructure and Mobility Score (SIMS)



Source: Ministry for Sustainable Infrastructures and Mobility, Italy (<https://www.mit.gov.it/en/comunicazione/news/green-transition-minister-giovannini-oecd-council-italys-strong-commitment-just>).

### *Realigning the policy structures that support the built environment*

**Policies concerning the built environment often call for input from a wide range of public and private agencies.** A well-being lens can help these agencies to overcome traditional government silos and coalesce around a common goal/vision, helping stakeholders to pivot and avoid digressing towards

the interests of individual agencies. Horizontal and vertical policy coherence is crucial in ensuring the effectiveness of diverse policies, and a well-being lens can help align the interests of different ministries (OECD, 2021<sup>[11]</sup>). For example, decarbonising buildings would require horizontal and vertical policy alignment and coordination between multiple policy areas so that a coherent message is sent out to cities and regions; in Japan, three ministries – the Ministry of Land, Infrastructure, Transport and Tourism; the Ministry of the Economy, Trade and Industry; and the Ministry of the Environment – had to develop a common roadmap (OECD, 2022<sup>[13]</sup>).

**A well-being lens can also contribute to realigning resources for the built environment, embedding a long-term focus.** Built environment policies and interventions often involve a long time-horizon, often taking 10 to 30 years from planning to full operation, which has implications not just for well-being and inclusion today, but for several generations into the future. When there is a clear mandate to consider people’s well-being in the policy-making process, policy agents would be better incentivised to coordinate and negotiate the finite resources for the built environment with a long-term focus, rather than focusing on their immediate tasks and those that they are directly accountable for. For example, Korea’s 5th Comprehensive National Territorial Plan (2020-2040), which came into effect in 2020, focuses on setting the strategic policy direction for “sustainable development and people’s happy lives as well as building a social consensus” (Cha and Jeong, 2020<sup>[14]</sup>). Faced with criticism that, despite being the highest national spatial plan, the previous plans lacked guidance for sectoral and sub-regional plans and also for the participation of the central government’s different ministries and the local governments, the fifth plan sought to redefine its status as the “indicative policy plan” that leads the direction of the country’s land policies with “planning guidelines and indicators” (Cha and Jeong, 2020<sup>[14]</sup>). In particular, the Ministry of Land, Infrastructure and Transport and the Ministry of the Environment jointly developed a practical model of drawing up an integrated land-environment management strategy, aligning the Comprehensive National Territorial Plan with the Comprehensive National Environment Plan, implementing a joint monitoring system for the execution of both plans (MOLIT, 2019<sup>[15]</sup>).

*Reconnecting the various public, private and civil society actors that shape and make use of the built environment*

**Across the lifecycle of the built environment – from planning to financing and maintaining it – a well-being approach can be used to support dialogue and engagement among the multitude of actors that create, shape and use the built environment.** This includes strengthening citizen and external stakeholder participation in various stages of policy development and decision-making concerning the built environment. A clear well-being vision and statement around the built environment can also stimulate more effective and productive public debate. In Wales, the Well-being of Future Generations (Wales) Act 2015, which outlined seven well-being goals, provided the basis for the construction sector’s interest in building a sustainable built environment (Constructing Excellence in Wales, 2023<sup>[16]</sup>). For example, Constructing Excellence in Wales (CE Wales), an independent body representing each part of the built environment’s supply chain, has been championing collaboration and best practices, working with organisations in both the public and private sectors. In 2019, CE Wales organised a conference in partnership with the Future Generation Wales and engaged almost 300 stakeholders and a further 130 organisations to develop ideas for construction well-being objectives that support the seven well-being goals, such as proposals to make designs more people-centric, promoting physical and psychological well-being and serving the broader social needs of the community (Constructing Excellence in Wales, 2023<sup>[16]</sup>). Furthermore, empowered residents reported more positive attitudes towards their surroundings and housing providers (Baba et al., 2016<sup>[17]</sup>). This approach will help amass social capital as well as restore trust in institutions surrounding the built environment. In Elk Grove, a city in the United States, city planners created an online simulation for residents to choose different scenarios of projects providing affordable housing units (Adam, 2022<sup>[18]</sup>). Input from residents helped the planners to build an overall plan of recommended projects, with no less than 65 percent support from all the respondents (Adam, 2022<sup>[18]</sup>).

**Consultations with stakeholders are often required by law for infrastructure development projects, but they usually lack quality discussions on the well-being dimensions of the built environment.**

Introducing dimensions of well-being can improve the consultation process and make it more relevant to people's lives. For example, there have been efforts to involve citizens in energy sector planning and decision-making in Canada, with deliberative consultations on energy policy in some provincial settings, but there have been reservations about these not leading to policy empowerment or co-production (MacArthur et al., 2020<sup>[19]</sup>). There is the necessity for an incentive/reward system for the government agencies to actively involve external stakeholders in their processes. Delays in the timeline of infrastructure projects would generate additional costs for the government and the companies. Unless the benefits of involving diverse stakeholders in the dialogue are manifest, it would be difficult for them to prioritise public consultation processes. Moreover, hard-to-reach populations are not always represented in the process. Hence, it is necessary to build civil service capacity and shift cultures of practice within institutions so as to recognise the importance of such dialogue and communication between government and citizens of all layers. In Britain, the National Infrastructure Commission (NIC) established the Young Professionals Panel (YPP) in 2018, which brings together professionals from across industry to provide fresh thinking to the NIC's work (NIC, n.d.<sup>[20]</sup>). For example, the YPP is using its podcast to inform the NIC's work about the role of infrastructure in levelling up disparities in the economic geography of the United Kingdom (NIC, n.d.<sup>[20]</sup>).

### 3.3. Countries' experiences: Well-being and sustainability policies for the built environment

Expanding on the previous section's general discussion of well-being approaches and the built environment, this section will look at country-level cases: New Zealand's housing and urban policies and Ireland's sustainable mobility policy. Some of these cases concern broader national strategies while some are more sectoral policies or specific policy interventions. The strengths and weaknesses of these case studies will be examined with reference to the four R's introduced in the previous section: refocus, redesign, realign and reconnect.

#### 3.3.1. New Zealand's housing and urban policies and well-being

New Zealand has significant experience in applying a well-being lens to the built environment, notably in measuring the well-being impacts of public policy and collecting well-being evidence to monitor progress on the built environment. As discussed earlier, housing is an important determinant of well-being, which is reflected in its inclusion as one of twelve domains under the Treasury's Living Standards Framework. This section will illustrate in more detail how New Zealand's housing as well as urban policies have evolved to consider various dimensions of well-being in the planning, implementation and evaluation of policies, with a particular focus on housing affordability and housing quality.

##### *Refocusing on well-being to anchor housing and urban policies*

In the face of rising housing prices, the New Zealand government has taken steps to boost the supply or renovate its housing stock to tackle the issue of housing affordability. Strong demand (with greater access to credit and high immigration) and weak supply responsiveness have been cited as being responsible for a rapid price escalation over the past two decades (Barker, 2019<sup>[21]</sup>). Housing costs consume more than 40% of disposable income for tenant households in the bottom quintile of the income distribution in New Zealand (OECD, 2023<sup>[22]</sup>). Despite the rapid pace of housing construction over the last decade, the number of dwellings per inhabitant in New Zealand remains below the average for the OECD (Fitchett and Jacob, 2022<sup>[23]</sup>). Unaffordable housing has also led to an increase in people experiencing housing distress or homelessness. Against this backdrop, the principles of well-being are increasingly being applied to change

the strategic course of housing and urban development policies in New Zealand through national strategic statements, legislation about homes and communities, as well as the establishment of a new public housing and urban development agency:

- Partly due to variations in capabilities and in the application of evidence, New Zealand councils have historically taken approaches to urban planning that have nevertheless tended to result in less dense, car-dependent cities that lack affordable housing. *The National Policy Statement on Urban Development (NPS-UD)*, which came into force in August 2020, is a legal direction to councils to remove restrictions and plan for growth both up and out, and to allow for denser housing in areas where people want to live, and connected to jobs, transport and community facilities (Ministry of Housing and Urban Development, n.d.<sup>[24]</sup>).
- The *Kāinga Ora – Homes and Communities Act 2019* provides that when preparing or reviewing a *Government Policy Statement on Housing and Urban Development (GPS-HUD)*, the Minister must be satisfied that it promotes a housing and urban development system that contributes to the current and future well-being of New Zealanders (New Zealand Legislation, 2019<sup>[25]</sup>). Based on this, the New Zealand Government has published the GPS-HUD, a multi-decade strategy that sets the vision and direction for housing and urban development (Ministry of Housing and Urban Development, 2021<sup>[26]</sup>). “Wellbeing through housing” is identified as one of its four main outcomes over the next 30 years, based on input from organisations and individuals from communities across the country, which outlined a consensus on the housing and urban outcomes that New Zealanders want to see (Ministry of Housing and Urban Development, 2021<sup>[26]</sup>). The GPS-HUD acts as an anchor from which aligned and consistent decisions can be made and gives the wider system visibility on how government intends to work and focus its energy and resources (Ministry of Housing and Urban Development, 2021<sup>[26]</sup>). It also provides the private sector an important context in which they can decide how to shift their own operations to respond to this direction, in partnership with government, with each other, or independently (Ministry of Housing and Urban Development, 2021<sup>[26]</sup>).
- Housing and Urban Development Indicators track progress towards the long-term goals in the GPS-HUD and *MAIHI Ka Ora*, the National Māori Housing Strategy (Ministry of Housing and Urban Development, n.d.<sup>[27]</sup>). These indicators include information on homelessness, housing support, transport and urban areas, as well as on housing providers and funding. In addition to being strategic indicators of change in housing well-being, the indicators are selected to measure change in the whole system, rather than measuring specific policies or programmes, and to measure change at a national level, with information for population, geographic and tenure groups where appropriate.
- Cognizant of the importance of gearing support towards vulnerable populations such as low-income households living in rented accommodation, efforts to improve access to and the quality of public housing are also underway. The establishment of *Kāinga Ora* in 2019, a public housing provider and urban development agency, further highlights such a shift. With its Māori name meaning “wellbeing through places and communities” (Kainga Ora, 2023<sup>[28]</sup>), the objectives of *Kāinga Ora* are to “provide good quality housing that meet diverse needs; support good access to jobs, amenities and services; and sustain or enhance the overall economic, social, environmental and cultural wellbeing of current and future generations” (Ministry of Housing and Urban Development, 2023<sup>[29]</sup>).

### *Redesigning policies with multidimensional well-being evidence*

Well-being evidence, generated in collaboration with different stakeholders, is being used to shape the built environment policies in New Zealand and to highlight both the interconnected drivers and impact of built environment policies:

- In addition to direction setting strategies such as the GPS-HUD and *MAIHI Ka Ora, Long-term Insights Briefings* (“*Briefings*”) provide the public with information about medium and long-term trends, risks and opportunities affecting Aotearoa New Zealand at least 10 years into the future, together with options for how the country might respond (Ministry of Housing and Urban Development, n.d.<sup>[30]</sup>). The Briefings are made to Parliament, rather than to Cabinet or ministers, and departments determine the topic, ensuring that any political party, government department, stakeholder or advocacy group can access the high-level advice and incorporate it into their context. This helps bring well-being more coherently to the fore of long-term policies (Ministry of Housing and Urban Development, n.d.<sup>[30]</sup>).
- Various efforts to identify multidimensional drivers of well-being for the built environment are also underway in New Zealand. For example, *Te Hotonga Hapori* (Connecting Communities) is a research programme aimed at providing information on the well-being effects of urban housing redevelopment, including on mental and physical health and a sense of community and place. Funded by the Ministry of Business, Innovation and Employment (MBIE), this project will determine the impact of urban redevelopment on community well-being as well as personal well-being of Kāinga Ora tenants with well-being indicators such as life satisfaction, social connectedness and cultural identity (AUT, 2021<sup>[31]</sup>). These well-being evidences will be used to give developers and policy makers information about the multifaceted impact of urban redevelopment on mental and physical health and a sense of community and place so as to give direction to further improvements (AUT, 2021<sup>[31]</sup>).
- A study funded by the Ministry of Social Development found dampness in a baby’s room to be associated with chest infections and with cough lasting more than a week in the first nine months of children’s lives (Ministry of Social Development, 2021<sup>[32]</sup>). Another study, which showed that rental housing in New Zealand is generally older, colder, damper and mouldier than owner-occupied housing (Howden-Chapman et al., 2021<sup>[33]</sup>), helped provide an evidence base for the 2018 World Health Organization (WHO)’s *Housing and Health Guidelines* (World Health Organization (WHO), 2018<sup>[34]</sup>). The New Zealand Government has in turn introduced higher standards for rental housing (Howden-Chapman et al., 2021<sup>[33]</sup>).

### *Realigning different agencies and partners around a common vision of success*

The GPS-HUD and *MAIHI Ka Ora* together set the vision and direction for the housing and urban development systems in New Zealand. Successfully implementing these strategies requires central and local government to partner and collaborate with others to enable a system-wide response. Different parts of the system bring different skillsets and knowledge to the table, which together, can help achieve large-scale and systemic change. Detailed roles of key actors are outlined, such as the Ministry of Housing and Urban Development (HUD) and Kāinga Ora, while also stressing the importance of other agencies such as the Ministry of Business, Innovation and Employment, the Ministry for the Environment, the Ministry of Transport and the Ministry for Pacific Peoples. HUD is also working closely with the Treasury and the Reserve Bank of New Zealand not just to understand what is happening in the housing market, but also to better understand what tools are available to deliver better housing outcomes (Ministry of Housing and Urban Development, 2021<sup>[26]</sup>). In particular, implementation plans for both the GPS-HUD and *MAIHI Ka Ora* strategies were published in 2022. These provide more information about the actions, roles, and responsibilities across the system for delivering the change required to realise system outcomes. HUD will be reporting on progress against outcome indicators and the government work programme annually, to ensure effective responses to changes in context of what is happening in the system.

### *Reconnecting with the wider community*

The New Zealand government has worked closely in partnership with public stakeholders, including local government and the private sector as well as those whose lives are most directly affected by policies (e.g. Box 3.4), to successfully implement its housing and urban policies:

- HUD recognises the necessity to partner or collaborate with the private sector in order to deliver better housing and urban outcomes, given its significant role in funding, financing, designing, constructing, delivering and maintaining the built environment (Ministry of Housing and Urban Development, 2021<sup>[26]</sup>). It highlights the role of the private sector as the largest provider of housing in New Zealand, through both owner-occupation and rental provision (Ministry of Housing and Urban Development, 2021<sup>[26]</sup>). HUD has committed to support the building and construction sector by: supporting innovative building methods that speed up and scale up construction, facilitating investment in skills and training across industries, exploring ways of streamlining building consent, and taking action to ensure efficient supply chains (Ministry of Housing and Urban Development, 2021<sup>[26]</sup>).
- On the other hand, *The Māori and Iwi Housing Innovation Framework for Action (MAIHI)* seeks to strengthen a Māori-government partnership, with Māori housing partners engaged in informing and designing processes of housing solutions. Recognising the evidence that Māori face disproportionately high levels of homelessness; high rental costs as a share of income; low rates of home ownership; and high rates of intergenerational poverty relative to the total New Zealand population, it stresses the importance of co-design and partnership “that are underpinned by the values and lived experience of Māori” and housing solutions “by Māori, for Māori” are central to both its vision and delivery approach. MAIHI calls for the governments’ efforts and investment to be relevant to Māori, considering all dimensions of well-being, including cultural values (Office of the Associate Minister of Housing and Chair, n.d.<sup>[35]</sup>; Ministry of Housing and Urban Development, n.d.<sup>[36]</sup>).
- The New Zealand Centre for Sustainable Cities, an interdisciplinary research centre, partners with Māori urban authorities, iwi<sup>1</sup>, community and regional councils and territorial local authorities, as well as national policy agencies, to focus on how to maximise well-being through public housing (New Zealand Centre for Sustainable Cities, 2021<sup>[37]</sup>). Partnering with community-led agencies (e.g. Salvation Army, Dwell), as well as public housing providers (e.g. the Tāmaki regeneration programme, Wellington City Council), the Centre aims to provide evidence on the well-being of tenants and the community, community formation and local urban design, carbon emissions related to energy and transport use, and housing quality, to help improve public housing policies and also support more effective allocation of government funding.

#### **Box 3.4. Reconnecting to deliver: New Zealand’s *Healthy Homes Initiative***

- The *Healthy Homes Initiative (HHI)*, led by the Ministry of Health (Te Whatu Ora – Health New Zealand), is an example of an integrated policy approach for well-being and the built environment, to improve housing quality while also reducing health inequalities across ethnic and social groups. Under this initiative, interventions such as ventilation, heating sources, support with power bills and minor repairs are provided for eligible families to ensure better health and social outcomes (Health New Zealand, 2023<sup>[38]</sup>). The *Healthy Homes Initiative* is funded and overseen by the Ministry of Health, working closely with key government agencies such as Kāinga Ora and the Ministry of Social Development (Health New Zealand, 2023<sup>[38]</sup>). Specific illustrations include families eligible for the Rheumatic Fever Fast Track being put on



the social housing wait-list, and Kāinga Ora tenants being provided with access to key capital interventions such as insulation (Health New Zealand, 2023<sup>[39]</sup>).

- **Reconnecting with people in need led to successful implementation of HHI interventions.** The evaluation report for the HHI illustrates cases where a prolonged relationship between the recipient of the support and the HHI assessor enabled successful delivery of information and support (Health New Zealand, 2023<sup>[39]</sup>). For example, a family of four living in a rental property with health and safety issues within the home received support for minor repairs and information on home maintenance as well as the options available regarding the Tenancy Tribunal and advocacy via Community Law, from the HHI Assessor. The HHI Assessor helped the family become aware of their rights as tenants, and the family was subsequently awarded compensation from the landlord and then supported to secure a new private rental home (Health New Zealand, 2023<sup>[39]</sup>).
- The evaluation report also found “unambiguous evidence of broad improvements in well-being”, underlining the rationale for the expansion of the programme (Health New Zealand, 2023<sup>[39]</sup>), by highlighting inter-linked well-being impacts of the interventions. For example, the HHI intervention had a positive impact on employment (with a 4% increase in employment among adults aged 24 to 64), and the value of social benefits from the initiative led to a return on investment within a year (Health New Zealand, 2023<sup>[39]</sup>).

Source: (Health New Zealand, 2023<sup>[39]</sup>), *Healthy Homes Initiative – Te Whatu Ora – Health New Zealand*, <https://www.tewhaturora.govt.nz/keeping-well/for-families-and-children/healthy-homes-initiative/#healthy-homes-initiative-three-year-outcomes-evaluation>; (Health New Zealand, 2023<sup>[39]</sup>), *Healthy Homes Initiative: Three year outcomes evaluation*, <https://www.tewhaturora.govt.nz/publications/healthy-homes-initiative-three-year-outcomes-evaluation/>.

### 3.3.2. Ireland's transport policies for sustainability and well-being

Ireland's Department of Transport published its *National Sustainable Mobility Policy (SMP)* in April 2022, setting out a strategic framework and specific action plan to support a shift to more sustainable transport modes between now and 2030 (Department of Transport, 2022<sup>[40]</sup>). Its main objectives are to promote active transport journeys, such as walking and cycling, along with public transport use, while reducing private car journeys. Transport accounts for 18% of the total greenhouse gas emissions in Ireland, with road transport making up 94% of total transport emissions, and the *National Sustainable Mobility Policy* is aimed at helping Ireland meet its carbon emissions target of a 51% reduction by 2030.

#### *Refocusing on sustainable mobility and towards sustainable accessibility*

The current transport system in Ireland is car-dependent, with private car use accounting for 74% of all journeys (Department of Transport, 2022<sup>[40]</sup>). There are geographic variations, as evidenced by the 2016 Census, where 55% of residents of the Greater Dublin Area reported that they travel to work by car, against 70% for those residing outside the metropolitan area (National Transport Authority, 2022<sup>[41]</sup>). Increasing mobility by enlarging transport volume (i.e. by constructing new roads) or by introducing measures to curb congestion, however, would not necessarily lead to greater well-being. OECD (2022<sup>[42]</sup>) illustrates an example of how well-being can be undermined when people are forced to travel further to meet their daily needs after local stores close down. Mobility could be seen at a glance as having improved, but it would be a misleading proxy for well-being. Ensuring accessibility via sustainable transport modes, on the other hand, can support both present and future well-being.

Placing well-being at the centre of transport policies could help change the overall trajectory of transport planning, from expanding mobility by road transport towards supporting sustainable accessibility. Transformative policies that change the car-dependent system from its core, can help achieve multiple

well-being outcomes, rather than simply addressing negative impacts of the unsustainable transport system (OECD, 2022<sup>[42]</sup>). Along these lines, the vision of the SMP is to “connect people and places with sustainable mobility”. To nudge people towards more sustainable travel patterns, the Policy aims to “improve and expand walking, cycling and public transport options across the country”. The principles and goals of the Policy (Table 3.2) also show that it incorporates various dimensions of both the government of Ireland’s Well-Being Framework (Government of Ireland, 2022<sup>[43]</sup>) and the OECD Well-being Framework, such as safety, environmental quality, affordability, accessibility as well as inclusiveness for vulnerable populations. Achieving these goals can provide not just current well-being gains but also resources for people’s future well-being.

**Table 3.2. Principles and goals of Ireland’s Sustainable Mobility Policy**

Principles	Goals
Safe and Green Mobility	1. Improve mobility safety.
	2. Decarbonise public transport.
	3. Expand availability of sustainable mobility in metropolitan areas.
	4. Expand availability of sustainable mobility in regional and rural areas.
	5. Encourage people to choose sustainable mobility over the private car.
People-Focused Mobility	6. Take a whole-of-journey approach to mobility, promoting inclusive access for all.
	7. Design infrastructure according to Universal Design Principles and the Hierarchy of Road Users model.
	8. Promote sustainable mobility through research and citizen engagement.
Better Integrated Mobility	9. Better integrate land use and transport planning at all levels.
	10. Promote smart and integrated mobility through innovative technologies and development of appropriate regulation.

Source: Adapted from (Department of Transport, 2022<sup>[40]</sup>), National Sustainable Mobility Policy, <https://www.gov.ie/en/publication/848df-national-sustainable-mobility-policy/#>.

### *Redesigning the transport system to address multiple dimensions of people’s needs*

The SMP deals with multiple dimensions of the Irish Government’s Well-Being Framework, with some dimensions more explicitly illustrated in specific goals. For example:

- The need for mobility to support people’s **safety** is emphasised. Although Ireland had the second-lowest rate of road deaths in the EU in 2019 (Government of Ireland, 2021<sup>[44]</sup>), challenges remain, especially for those who walk or cycle on roads. Some of the policies included in the SMP to improve the safety of mobility options include provision of a safer walking and cycling infrastructure within communities especially adjacent to schools; ensuring safe interchange between active travel and public transport; promoting the safety of railway network and services; and investing in the maintenance of the existing road network to a safe standard.
- **Environmental quality** is covered extensively, both in terms of its contribution to current well-being (such as cleaner air today) and in terms of laying the foundation for future well-being (such as through more sustainable low-emissions transport modes). Goal 2 of the SMP aims to “reduce emissions by transitioning the bus, rail and small public service vehicle (SPSV) fleet across the country to low/zero emission vehicles”. Transitioning subsidised bus fleets to zero emissions vehicles; increasing the rail network with electrified services; and expanding electric vehicles in the SPSV sector are the key measures included to achieve this goal.
- **Inequality** is addressed in terms of expanding sustainable mobility options for regional and rural areas. Delivery of improved walking and cycling infrastructure in towns and villages; expansion of bus services; as well as improving inter-regional connectivity will help increase connectivity for people in rural areas.

- The **inclusiveness of the transport infrastructure and system** for all people regardless of age, size or disability is highlighted. For example, ensuring that bus and train stations are accessible for people with reduced mobility, as well as introducing a Young Adult Travel card that will provide a 50% discount on all subsidised public transport services, all aim at improving inclusive access for all.

### *Realigning land use and transport planning*

The SMP is accompanied by a concrete action plan to 2025, which will be supported by complementary actions from other relevant national strategies. It is based on the OECD recommendation (OECD, 2022<sup>[42]</sup>), which called for the adoption of a clear implementation plan with specific targets, budgets and responsibilities across all governmental bodies, while revisiting measurement frameworks and models. In addition, a Leadership Group, chaired by the Department of Transport and including key stakeholders who will lead implementation of the actions under the SMP, will be established to ensure smooth delivery of the Policy, including the mid-term review scheduled to take place in 2025 (Department of Transport, 2022<sup>[40]</sup>).

Better understanding of the interconnectedness of well-being outcomes can strengthen policy integration and coherence. One example of such a policy area is the integration of land-use and transport planning that aims to support “compact growth and transport-oriented development” (Department of Transport, 2022<sup>[40]</sup>). Sustainable and well-connected communities with a high quality of life are feasible only under housing development plans that incorporate the installation of a quality public transport system. There is also a mutual reinforcement of compact growth when active transport modes are promoted in limited urban space with a high population density. The SMP details how integration should happen at different levels of the policy hierarchy:

- At the national level, the National Planning Framework (NPF) has the objective of compact growth, and to achieve this objective, a working group has been established to consider transport-oriented development in major urban areas, jointly chaired by the Department of Transport and the Department of Housing, Local Government and Heritage (Department of Transport, 2022<sup>[40]</sup>).
- At the regional level, as the Regional Spatial and Economic Strategies are reviewed, the National Transport Authority will provide an analysis of “land use development potential based on accessibility to the core public transport network” (Department of Transport, 2022<sup>[40]</sup>).
- At the metropolitan and local levels, the metropolitan area transport strategies and the local transport plans need to ensure delivery of multi-modal transport infrastructure and the integration of sustainable transport and land-use planning. For example, the concept of “10-Minute Towns”, which “seeks to have all community facilities and services accessible within a 10 minute walk or cycle from homes or are accessible by public transport services connecting people to larger scaled settlements” (Southern Regional Assembly, n.d.<sup>[45]</sup>), is supported by the Southern Regional Assembly (SRA), which is the regional tier of government established under the Local Government Reform Act 2014. The SRA forges links between the EU and national and local levels, and has devised a framework and methodology of 10-Minute Towns for local authorities to use as implementation tools for their key towns (Southern Regional Assembly, n.d.<sup>[45]</sup>).
- The importance of the “correct sequencing” of spatial and transport planning is also highlighted. For instance, making investments in interurban connectivity could have adverse or unanticipated consequences, such as urban sprawl. For the purpose of better coordination during the development process, the Department of Transport, in consultation with the Department of Housing, Local Government and Heritage, will review ways of strengthening transport appraisal requirements around the assessment of spatial and land-use considerations in its sectoral guidance (Department of Transport, 2022<sup>[40]</sup>).

### *Reconnecting through public consultation and stakeholder engagement*

Public consultations provided the backbone of the SMP, heavily influencing the development of the Policy framework and action plan (Department of Transport, 2022<sup>[40]</sup>). According to the Department of Transport, development of the policy began with a roundtable forum in 2018 for diverse stakeholders. An extensive set of background papers was produced, providing the basis for the public consultation process that ran from November 2019 to February 2020. Specific questions about the vision, objectives and targets for sustainable mobility were asked, as well as questions about enhancing the quality, reliability, safety and integration of sustainable mobility services (Government of Ireland, 2019<sup>[46]</sup>). A broad range of themes, such as active travel (27%), rural transport (15%), accessibility (12%), land-use and transport planning (11%) and regulation (11%), were included in over 250 submissions that were received in the public Department's website, from a variety of public and private stakeholders during the consultation process. In addition to public consultations, other government departments, academics, business groups and disability representatives were consulted on a bilateral basis (Department of Transport, 2022<sup>[40]</sup>).

Moving forward, OECD (2022<sup>[42]</sup>) has recommended 1) redefining the goal of the transport system as sustainable accessibility; 2) prioritising the up-scale of transformative policies; 3) redefining the electrification strategy to support the transition towards a sustainable transport system; and 4) embracing a systemic approach to policy decision-making across government departments. Exposing people to the benefits of sustainable transport systems, such as reduced obesity or less air pollution, as well as providing people with opportunities to experience sustainable transport modes, such as bikes, will be instrumental in transforming people's behaviours. These efforts would be helpful in transforming the ingrained mindset that favours private cars over other sustainable transport modes. It is also necessary to recognise the importance of accommodating the needs of the hard-to-reach groups in the implementation stage of the SMP, whose opinions could easily be overlooked in the public consultation processes.

### **3.4. Conclusion and ways forward**

**The benefits of generally applying a well-being lens to policy extend to policies on the built environment as well.** A well-being lens on policy allows policy makers to consider various dimensions of policy impacts on people's lives in a more systematic way. Many OECD countries have already included domains or indicators related to the built environment in their national well-being initiatives, some more explicitly than others. Dimensions of housing and transport/mobility appear frequently, but indicators under broad domains of environment and safety also often touch upon aspects of the built environment. Subjective well-being indicators and people's perceptions of the built environment are also frequently included, such as people's satisfaction with the living environment or commuting. There have also been calls for more detailed well-being datasets to be developed by agencies, including those more directly dealing with policies concerning the built environment, such as ministries of housing, urban planning, transport or infrastructure, in addition to national well-being frameworks that are often developed by the finance ministry or National Statistical Offices.

**This chapter has presented how a well-being lens can be used in *refocusing, redesigning, realigning and reconnecting (4Rs)* policies on the built environment.** Refocusing is necessary to put the built environment back on a positive trajectory in terms of sustainability and well-being and also to close the widening gap in society. Redesigning built environment policies with well-being evidence can help address possible synergies, trade-offs and unintended consequences that different policies related to the built environment may generate. A well-being lens can also contribute to realigning resources for the built environment with a long-term time horizon. Policies concerning the built environment require input from a wide variety of stakeholders, and a well-being lens can help reconnect the public and the private sector as well as civil society.

**Defining, measuring and analysing the built environment through a well-being lens can lay the foundation for embedding well-being evidence in built environment policy-making more broadly.**

Beyond expanding the scope of cost-benefit analysis in economic terms to include other important social and environmental dimensions, a well-being lens can help policy makers better understand and manage the multifaceted trade-offs and synergies inherent in designing and delivering built environment policies. Given the long lifespan of much of the accompanying infrastructure, built environment policies call for a long-term perspective, and a well-being lens that considers both current and future well-being could be helpful in aligning short-term and long-term policy objectives.

**Better assessment of the impact of the built environment on well-being across population groups and countries, as well as within countries, is necessary.** Data and evidence gaps remain that need to be addressed in order to advance an integrated policy approach in OECD countries. Internationally comparable data relevant to the built environment is often limited in geographical scope (e.g. only having data on metropolitan areas, missing out on rural areas or urban-rural linkages) or misses out on important population groups (e.g. children or the elderly). Country-specific analysis or detailed country profiles will prove to be useful in considering the different historical, cultural and political contexts of countries and regions for the built environment. Exploring the impact of the built environment on the lives of certain vulnerable population groups could also help improve policies concerning these groups (e.g. built environment policies for the disabled population).

**Analysing the inter-relationship between well-being and the built environment underscored many dimensions of the built environment that impact people's lives and societal sustainability and that are oftentimes overlooked in the policy-making process.** As more well-being data related to the built environment becomes available, it should be possible to conduct in-depth analysis on the causal relationship between dimensions of well-being and elements of the built environment. Performing multivariate analysis on components of the built environment and well-being dimensions will offer more detailed evidence on how the built environment impacts well-being, or vice-versa (i.e. how people's lives could shape or alter the built environment.)

**Considering different elements of the built environment (i.e. housing, transport, urban planning/land use, technical infrastructure) side by side can highlight the balance of performance and relative strengths and weaknesses.** However, different components also relate to one another. More work could be done to help understand how interactions between elements of the built environment have a profound impact on people's quality of life (e.g. how transport infrastructure facilitating longer commutes influences urban design and the housing market and their impact on people's well-being). Some features of the built environment will also have mixed impacts on well-being. In many ways, this would highlight the benefit of applying a well-being lens: to bring greater transparency on the wide-ranging impacts and elucidating the trade-offs so that they can be better managed. Further work is needed to better understand precise trade-offs that might be involved across the different components.

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## Annex 3.A. The built environment in national well-being frameworks and indicators

- In **Australia**, *Australia's Measuring What Matters: Australia's First Wellbeing Framework* (The Commonwealth of Australia, 2023<sup>[47]</sup>) was released in July 2023 by the Department of the Treasury and draws on the OECD Well-being Framework as a basis to measure progress and wellbeing. The Framework has 50 indicators on five well-being themes (Healthy, Secure, Sustainable, Cohesive, Prosperous). It also includes cross-cutting dimensions of inclusion, equity and fairness to reflect the need to ensure that wellbeing outcomes are fairly shared amongst the Australian population.
- **Austria** has been publishing an annual report on well-being in terms of material prosperity, quality of life and the environment since 2012, with the latest publication being the *How's Austria 2021* report (Austria, 2021<sup>[48]</sup>).
  - Under the *Quality of life* domain, housing indicators include housing cost overburden (where housing costs exceed 40% of household income), very poor standard of housing, and subjective environmental stress in the living environment. Among these indicators, the “very poor standard of housing” indicator is defined as when two of the following four conditions are met: 1) no bathroom; 2) no toilet; 3) damp walls or floors, rot in window frames or floors, leaking roof; and 4) dark rooms.
  - Transport and mobility indicators are included under the domain of the *Environment*. Indicators include energy consumption of transport, transport performance of truck traffic (i.e. transport volume linked to the distance travelled by road freight vehicles in Austrian territory), fuel consumption of private cars, use of public transport, and greenhouse gas emissions from transport.
- **Canada's** *Toward a Quality of Life Strategy for Canada* (Department of Finance Canada, 2021<sup>[49]</sup>) includes the five broad domains of quality of life: *Prosperity, Health, Environment, Society and Good Governance*. It applies two cross-cutting lenses, *Fairness and Inclusion* and *Sustainability and Resilience*, to each of these five domains. Each domain is further organised into two or four sub-domains that are associated with each of 83 indicators. Among these, housing needs is included in the set of 20 indicators (Statistics Canada, 2023<sup>[50]</sup>) that are being used in the context of budget assessments.
  - Under the domain of *Prosperity*, housing needs and homelessness are included, as indicators associated with economic security and deprivation.
  - Under the *Environment* domain, indicators such as clean drinking water, satisfaction with local environment, walkability index, access to public transit and waste management are examined. It is mentioned that the environment can be interpreted broadly to include more than just nature, as access to parks and public transit, walkable communities, lower levels of noise pollution and pleasing aesthetics in one's local environments all contribute to people's well-being. Access to pristine green and blue spaces is pointed out as a source of recreation as well as being important to Canadian identity and central to Indigenous cultures.
  - The *Health, Society and Good Governance* domains also have indicators that would enable a multidimensional perspective on the built environment, such as timely access to a primary care provider, a sense of belonging to the local community, an accessible environment, and

perceptions of neighbourhood safety after dark. Among these, an *accessible environment*, measured in the Canadian Survey on Disability (CSD), is the proportion of the population reporting having experienced barriers due to limited access to different areas and activities in daily life (e.g. floorplans inside buildings, lighting or sound levels inside buildings, sidewalks) due to a long-term physical or mental health condition (Statistics Canada, 2022<sup>[51]</sup>).

- **Germany's Government Report on Well-being in Germany** introduced the national well-being framework, comprised of 12 dimensions and 46 indicators that are updated on a regular basis (Federal Government, 2017<sup>[52]</sup>). The framework's 12 dimensions are further arranged into three broad groupings: aspects that directly concern people's lives and outcomes at the individual and household level ("Our Lives"); aspects that describe the surroundings in which people live ("Our Surroundings"); and aspects that relate to the national or global context, such as the foundations for social coexistence in Germany and the country's role in the world ("Our Country").
  - Three dimensions of "*Our Surroundings*" ("Standing together in family and society", "At home in urban and rural areas", "Living a life in security and freedom") describe safety, mobility, accommodation and social cohesion. Under "At home in urban and rural areas" are indicators such as the ratio of rental costs to net household income, travel time to educational, service and cultural facilities, and broadband access.<sup>2</sup>
- In **Iceland**, the Prime Minister's Committee on Indicators for measuring Well-being developed *Indicators for Well-being* in 2019 (Government of Iceland Prime Minister's Office, 2019<sup>[53]</sup>). The Committee proposed 39 indicators under the social, economic and environmental categories. There are a number of indicators directly related to the built environment: housing cost overburden, quality of housing, protected areas, quantity of municipal solid waste and recycling rate of municipal solid waste. The framework also includes elements of people's living conditions that relate, in part, to the built environment, such as feeling safe after dark.
- **Israel** adopted a resolution in 2015 requesting the Central Bureau of Statistics to publish a set of *Well-being, Sustainability, and National resilience indicators*, with the aim of examining changes in well-being in Israel, and for comparisons between different population groups (Central Bureau of Statistics, 2022<sup>[54]</sup>). The Central Bureau of Statistics updated the 80 indicators, spanning 11 domains, in 2020. One domain explicitly related to the built environment is *Housing and Infrastructure*. This domain includes the share of households who spent 30% or more of their net income on housing,<sup>3</sup> satisfaction with the dwelling, satisfaction with the area of residence, percentage of the population not connected to a sewage treatment system, population without access to water infrastructure, satisfaction with public transportation, housing density, dissatisfaction with commuting time, and the monthly cost of housing services out of disposable income (updated to 2018, base year 2003).
- **Ireland's First Report on a Well-Being Framework for Ireland** in 2021 set out an overarching vision, conceptual framework and dashboard, with a *Second Report* in 2022 (Government of Ireland, 2022<sup>[43]</sup>).
  - The well-being framework includes *Housing and the Built environment* as one of its 11 key dimensions. Access to housing is considered in terms of "the ability of a person to access and maintain secure housing", which is related to the affordability and availability of accommodation. The impact of housing quality on healthy living, such as the presence of damp or leaks or the quality of insulation, is also included. The "built environment" captures access to various services (e.g. education, transport and recreational facilities, health care, Internet connections, and utilities such as water and electricity). Indicators under this dimension include new dwelling completions, the number of domestic dwellings with an A or B energy rating,<sup>4</sup> the at risk of poverty rate after rent and mortgage interest, and the average distance to everyday services.



- Another dimension, *Environment, Climate and Biodiversity*, measures human impact, which is intended to capture the level of emissions, land use, waste and biodiversity. Indicators relevant to the built environment include the proportion of waste to landfill, and water bodies assessed as “high” or “good”.<sup>5</sup>
- The dimension of *Safety and Security* includes people’s perceptions of safety and security, such as how safe a person feels in everyday activities such as walking home at night or on public transport. It also considers the risks and impacts associated with infrastructural hazards. Safety and Security indicators broadly related to the built environment include persons killed or injured on roads and the percentage of the population who worry they could be a victim of a crime.
- In **Korea**, Statistics Korea has been updating its *National Quality of Life Index* since 2014, with the objective of providing information for policies to improve people’s well-being (Statistics Research Institute, 2023<sup>[55]</sup>). It considers 71 different indicators under 11 dimensions. Indicators under the three dimensions of *Housing, Environment* and *Safety* each describe the state of the built environment from different angles. The *Housing* dimension includes indicators such as the home-ownership rate, rent-to-income ratio, living space per capita, dwellings without basic facilities (i.e. kitchen, toilet/bathroom), commuting time to workplace, and housing environment satisfaction. The *Environment* dimension includes indicators such as public park size per person in a city and the water supply coverage rate of a rural area. Several self-reported indicators that address people’s perceptions of their living environment are also included: satisfaction rates for air quality, water quality, soil environment, noise level and green environment. As for the *Safety* dimension, indicators such as feeling safe walking alone at night, the road casualty rate, and the accident-induced child death rate are included.
- In the **Netherlands**, Statistics Netherlands (CBS) has published three editions of the *Monitor of Well-being and the Sustainable Development Goals* since 2017, using a structured set of indicators and a description of the trends over time (CBS, 2020<sup>[56]</sup>). The *Monitor* describes trends in well-being for Dutch people “here and now” by outlining the current level of well-being as well as the well-being “later” for future generations. It also adds a description of the way well-being is distributed over various population groups. To make observations about trends of well-being relevant to the built environment, indicators are used such as time lost due to traffic congestion and delays, housing quality, satisfaction with housing, often feeling unsafe in the neighbourhood, quality of inland bathing waters, urban exposure to small particulate matter air pollution. Examples of indicators for the distribution of well-being relevant to the built environment are satisfaction with commuter travelling time, quality of housing, satisfaction with housing, feeling unsafe in the neighbourhood, and experiencing pollution in one’s own neighbourhood.
- **New Zealand’s** Treasury published their first official *Living Standards Framework (LSF) Dashboard* in 2018. The LSF is intended as a practical tool both for analysts and for promoting a broader assessment of policy options. The LSF Dashboard (2021 edition (New Zealand Treasury, 2021<sup>[57]</sup>)) spans three levels: 1) *our individual and collective well-being*; 2) *our institutions and governance*; and 3) *the wealth of Aotearoa New Zealand*.
  - Of the 12 domains of well-being under *our individual and collective well-being*, the domains most directly relevant to the built environment are housing and environmental amenity. Housing is defined as “having a place to call home that is healthy, suitable, affordable and stable” and environmental amenity as “having access to and benefiting from a quality natural and built environment, including clean air and water, green space, forests and parks, wild fish and game stocks, recreational facilities and transport networks”. Existing indicators under housing are household crowding, housing cost and housing quality, but provisional well-being indicators for the LSF2021 Dashboard for housing have newly introduced the age-standardised home

ownership rate. For the domain of environmental amenity, the indicators linked to the built environment are access to the natural environment, water quality and public transport accessibility.

- *The wealth of Aotearoa New Zealand* provides indicators for the four aspects of wealth: financial and physical capital, human capability, natural environment and social cohesion. Among these, financial and physical capital specifically includes “tangible, human-made assets, such as buildings, machinery and infrastructure”.
- The **United Kingdom’s** Office for National Statistics (ONS) examines the country’s progress (*Quality of Life in the UK*) across 10 domains of well-being: personal well-being, relationships, health, what we do, where we live, personal finance, economy, education and skills, governance and the environment (Office for National Statistics, 2023<sup>[58]</sup>). Indicators that describe the built environment are primarily placed under the domain of *Where we live*, detailing the quality of the local life and the community, and how people feel about it. Indicators include crime, feeling safe, accessed natural environment, belonging to the neighbourhood, access to key services, and satisfaction with accommodation.

## Notes

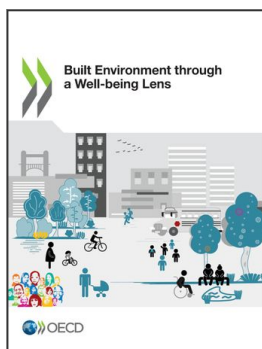
<sup>1</sup> An iwi, or Māori tribe, is one of the largest kinship groupings and is generally made up of several hapū that are all descended from a common ancestor. Hapū are clusters of whānau, where the whānau is usually an extended family grouping consisting of children, parents, often grandparents, and other closely related kin (Stats NZ DataInfo+, n.d.<sup>[59]</sup>).

<sup>2</sup> The ratio of rental costs to net household income provides information on rental housing exclusively, in particular how much people have to spend on rent and utilities out of their disposable monthly income. Travel time to educational, service and cultural facilities measures the time people need to travel from their homes to the nearest regional or major regional centres with public transport or by car. The indicator of broadband access is the percentage of households and businesses with access to high-speed (more than 50 Mbit/s) broadband connections.

<sup>3</sup> The net money income of a household is divided by the number of standard persons in the household. Household size affects the standard of living that can be maintained on a given income. To provide a basis for comparing the standard of living for households with varying numbers of members, the comparison is usually based on income per standard person. For that purpose, a scale was designed that determines a two-person household as the base unit. The larger the number of household members, the lower the marginal weight of each additional person in the household (size advantage) (Central Bureau of Statistics, 2022<sup>[54]</sup>).

<sup>4</sup> A Building Energy Rating (BER) is an indication of the energy performance of a dwelling (represented in units of kWh/m<sup>2</sup>/year). The BER certificate indicates the annual primary energy usage and carbon dioxide emissions associated with the provision of space heating, water heating, ventilation, lighting and associated pumps and fans. In Ireland, a BER certificate and advisory report is compulsory for all homes being sold or offered for rent since 1 January 2009. A BER is also required for new dwellings that apply for planning permission on or after 1 January 2007. A BER certificate is required to avail of the grants for energy-efficiency improvements to the home that are provided under the Better Energy Homes scheme (Central Statistics Office, n.d.<sup>[60]</sup>).

<sup>5</sup> This classification is based on the EU Water Framework Directive (2000/60/EC). Under the directive, water quality is ranked from best to worst as “high”, “good”, “moderate”, “poor” and “bad”.



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