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Title	Report of the Health Impact Assessment on the Core Strategy of the Cork City Development Plan (2022-2028)
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TECHNICAL ANNEX: REPORT OF THE HEALTH IMPACT ASSESSMENT OF THE CORK CITY DEVELOPMENT PLAN (2022-2028)

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1. Terms of reference for the HIA Steering Group, which worked alongside the HIA working group

Terms of Reference for the Governance of the Health Impact Assessment on the Cork City Development Plan 2022-2028

Item	Issue	Terms of Reference
1	The goal of the HIA	1. To identify the potential significant effects of the Cork City Development Plan (2022-2028) on population health 2. To identify opportunities and strengths for health gain in the Plan for improving health equity and reducing health inequalities. 3. To identify opportunities for reducing negative health impacts of the City Development Plan on population health.
	Policy context for the HIA	This HIA on the Cork City Development Plan (2022-2028) recognises the relevant policy context, in that there are statutory limitations on what can be or not included in a city development plan in Ireland. The plan is developed in accordance with national legislation. This HIA is working within this policy context.
2	The membership of the Steering Group and Working Group together with an explicit description of the roles and responsibilities of members	**Membership** Chair: Mary O'Mahony, HSE Advice and comment: Tadhg O'Mahony, EPA Advice and comment: Liz Ahern, Mayfield Community Development Project Advice and comment: Kevin O'Connor, Cork City Council Advice and comment: Darren McAdams-O'Connell, Transport Mobility Forum Advice and comment: Stephen Murphy Cork City Council Advice and comment: Martin Davoren, Sexual Health Network Advice and comment: Andrew Sulley, HSE Advice and comment: Deirdre Fitzell HSE Advice and comment: Marie Ryan, UCC Advice and comment: Gina Johnson, Climate Action Team, CCC Proponent: Cork City Council HIA Working Group: Karen O'Mahony (Cork City Council), Monica O'Mullane, Tara Kenny and Kirsty Nash (UCC)
3	The role of the Steering Group Chair	The chair will act as a co-ordinator at all meetings ensuring that discussions at the meetings are relevant and productive, that members and other attendees have the opportunity to express their views and that decisions made by the steering group are clear.
4	Agreement on definitions	Definition of health: "The extent to which an individual or group is able, on the one hand, to realise aspirations and satisfy needs and on the other hand to change or cope with the environment. Health is therefore seen as a resource for everyday life, not the objective of living; it is a positive concept emphasising social and personal resources as well as physical capabilities" (WHO, 1986). Inequality is found between different groups and can be measured in different ways, for instance, by geography, community, income, social position, and population. Health inequity is defined as avoidable differences in health (CSDH, 2008).

		Health Impact Assessment (HIA) is a process which systematically judges the potential, and sometimes unintended, effects of a project, programme, plan, policy, or strategy on the health of a population and the distribution of those effects within the population (Winkler et al., 2021). HIA is also an established tool for implementing Health in All Policies (HiAP) (DoH, 2013). HIA presents a systematic yet flexible way of gathering evidence to inform policies and decision-making, based on best available evidence. By being flexible and realistic, it is an approach that can improve decision making without imposing excessive demands on resources or creating unnecessary bureaucracy. The HIA guidance published by the Institute of Public Health Ireland has seven stages: Screening, scoping, appraisal, reporting, implementation, monitoring and evaluation of the process (Pyper et al., 2021). Impact assessment is the process of identifying the future consequences of a current or proposed action. The 'impact' is the difference between what would happen with the action and what would happen without it (IAIA, 2010).
5	The nature and frequency of the Working Group's feedback to the HIA Steering Group	Purpose and frequency of steering group meetings to be agreed. Reports issued to the steering group for review: • At the scoping stage; • At the draft report stage; • Other milestones- to be agreed as appropriate.
6	Regarding information and data sharing between agencies	This HIA will use publicly available data and therefore will not require or seek access to privately held data from any agencies. The Working Group may at times seek advice on publicly available data sources that the Steering Group is aware of, to inform the HIA.
7	The standards by which the HIA will be judged	The HIA will be prepared using the Institute of Public Health HIA guidance. Dr Margaret Douglas, HIA practitioner working in Public Health Scotland, will provide a review of the HIA once completed.
8	Disseminating information from the HIA	Any conditions associated with production and publication of findings and outputs is detailed in the research project HIA-IM information sheet and consent form. The final HIA report will be finalised and agreed by the Steering Group before being published.
9	An outline of the project plan including deadlines in line with agreed timelines.	Steering Group will be updated at each meeting.
10	The budget and source of funding	Funding for the HIA report publication and the community engagement/ public consultation being done as part of the HIA Appraisal stage will come from the Health Research Board funded project *Development of a Health Impact Assessment (HIA) Implementation Model: Enhancing Intersectoral Approaches in Tackling Health Inequalities* (HIA-IM) (Grant ID EIA2022001). Monica, Tara, and Kirsty are the research team for this project, HIA-IM.
11	How to deal with conflict and/ or disagreement	The screening and scoping phases of the HIA will work towards a consensus on the aims of the HIA and on the approaches to be used to gather data. All decisions are based on a majority view, which may

		include the chair, with the minority opinion recorded. The chair retains the casting vote. The Working Group reports to the HIA Steering Group. Definition for an interprofessional group - The interprofessional as opposed to multi-disciplinary concept is related to the nature of collaboration and defined as involving interactions between providers based on the achievement of decisions and plans of action by consensus and integration of the knowledge and assumptions of several professions in resolving complex problems. In this perspective multi-disciplinary approaches are based on consultation but defined as non-interactive because executive decisions are made by the provider initiating the consultations (Casto, 1994).
12	How changes to the terms of reference will be handled should they need to be made	Changes to the TOR will be agreed through the Steering Group. The Chair of the steering group will have the final say.

Adapted with thanks from Ben Cave (2011) and Harris et al. (2007)

Terms of References (TOR) Updated addressing issues noted at the 25.10.2023 and 31.1.2024 meetings of the HIA Steering Group by Monica O'Mullane.

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WHO 1986. Ottawa Charter for Health Promotion: First International Conference on Health Promotion. Ottawa, Canada.

WINKLER, M. S., VILIANI, F., KNOBLAUCH, A. M., CAVE, B., DIVALL, M., RAMESH, G., HARRIS-ROXAS, B. & FURU, P. 2021. Health Impact Assessment International Best Practice Principles. Fargo, USA: International Association for Impact Assessment.

2. Completed screening tool for the HIA on the Cork City Development Plan (2022-2028)

Adaptation of the Screening check-list in the IPH HIA guidance (page 110) (below) (Pyper et al., 2021)

Screening tool for case-by-case decisions for health in environmental assessments or standalone HIA		
STEP 1: Record of screening		
Title of policy	Cork City Development Plan, 2022-2028	
Date	January 2022: application for HRB research funding was submitted to conduct HIA on the CCDP. Project started in January 2023. Meeting between Monica O'Mullane (UCC), Kevin O'Connor (CCC) and Karen O'Mahoney (CCC) on 5.1.2024	
Organisation(s)/ person(s) performing screening	Monica O'Mullane (UCC), Kevin O'Connor (CCC) and Karen O'Mahoney (CCC)	
STEP 2: Broadly, based on available information, does the policy [1] have the potential to change 'risks' to human health? Will this happen in a way that is judged 'likely' to 'significantly' affect population health?		
Consider the following determinants that can influence physical, mental, and social wellbeing:	**Judgement** Yes/ No	**Brief justification** See notes below
Health inequalities	Yes	Health inequalities are persistent and widening in Cork city (Pobal, 2022), particularly when comparing deprivation indices between census data 2022 and 2016; northside of the city experiencing continued deprivation.
Healthy lifestyles	Yes	Across lifestyles that people engage in, particularly mobility, recreation and eating behaviours. The City Development Plan does not have remit for eating behaviours, however, mobility, community gardening and the provision of open space for recreation are relevant.
Safe and cohesive communities	Yes	The planning of communities is an important health determinant. The following planning themes are relevant: Housing provision and mix, employment, severance, open space, active travel/ mobility, community identity and society, safety.
Socio-economic conditions	Yes	The socio-economic profile of the population has an impact on health. Of relevant are: Employment type and location, mobility, housing provision and mix.
Environmental conditions	Yes	Environmental factors influence health outcomes. Of relevance are: Capacity of environmental infrastructure, the quality of the natural and built environment (air quality, noise, water, landscape) and mobility.
Health and social care services	Yes	Provision and access to services Mobility

STEP 3: Decision	Screened IN or OUT	Health in environmental assessment (SEA or EIA) or standalone HIA
If one or more answers in step 2 is 'yes', then an SEA or EIA is warranted on human health grounds. If neither an SEA or an EIA is applicable, then a standalone HIA is warranted.	IN	standalone HIA; mention that SEA has been completed on the CCDP
STEP 4: Notification		
Decision notified to proposal proponent/ stakeholders and / or the public:	Proponents of the policy: Kevin O'Connor, Cork City Council Karen O'Mahony, Cork City Council	

REFERENCES

Pobal (2022), Pobal Deprivation HP indices for Cork City, based on Census data 2022. Accessed 4.1.2023 https://data.pobal.ie/portal/apps/experiencebuilder/experience/?id=3b0acba7eb694ffa85340a60f81d516c

PYPER, R., CAVE, B., PURDY, J. & MCAVOY, H. 2021. Guidance. Health Impact Assessment: standalone HIA and health in Environmental Assessment. A manual. Dublin and Belfast: Institute of Public Health in Ireland.

3. Scoping table for the HIA on the Core Strategy of the Cork City Development Plan (2022-2028) (CCDP)

Final decision on scoping for HIA made at 13th March 2024 Steering Group meeting. Document created on 15th March 2024 and circulated to the HIA team.

Context for completing this table: This table has been populated with information gathered through the scoping workshop with the HIA Steering Group (31.1.2024), the meeting of the HIA Working Group (8.2.2024) who met to discuss mitigation and likelihood of impact of the CCDP on the determinants of health and population groups, and the meeting of the HIA team on 22.2.2024. Despite the acknowledgement of the influence of the CCDP on population health in the city, the scoping in/out exercise has been finalised with due recognition of limited resources available to the HIA team- specifically the Working Group- who will be gathering the evidence to support the HIA process. This latter point relates to proportionality of resources available, including time available, capacity to do the work and policy complexity. This part of proportionality is a key aspect to any HIA and is informed by the Institute of Public Health HIA guidance (p. 30).

Focus within the Cork City Development Plan of the HIA

As decided at the meeting of the HIA Steering Group on 25th October 2023, the HIA would focus on the Core Strategy (chapter 2) of the Cork City Development Plan. The population targets for Cork are set at a National Level for the period up to 2040. Core Strategies are legislative obligations and underline current and future iterations of City Development Plans. Therefore, there is a direct connection between the HIA on the Core Strategy and the development of the next two City Development Plans up to 2040. The Core Strategy as set out in chapter 2 details Strategic Objective (SO) 1 which is **Compact Liveable Growth.** The aim of this SO is to increase the population of Cork City in line with national and regional growth targets; to develop Cork City as an international compact, sustainable, healthy city of scale and the regional driver of growth by creating sustainable, liveable, integrated communities and neighbourhoods for all. A central function of the Core Strategy is ensuring an acceptable equilibrium in the supply of zoned, serviced land that allows for projected population growth up to 2028.

Strategic-level scoping tool			
Scoped in/ Scoped out	Health issue	Relevant to the assessment	Scoping Decision Rationale
Health inequalities			
In	Between population groups	Yes	The Core Strategy (chapter 2) of the Cork City Development Plan outlines the nine Strategic Objectives for the implementation of the Plan and specifically details Strategic Objective 1 which is Compact Liveable Growth. Based on professional judgement and information available, the scale of planned growth does have the potential to change health inequalities in order to promote health and wellbeing in a manner that could be deemed likely or significant to affect population heath. The Healthy Ireland national survey (2019) found that people living in deprived areas are more likely to suffer from health conditions compared to those in wealthier areas, reaffirming the persistent of health inequalities in Ireland. People in Ireland enjoying a healthy life is not evenly distributed in society, with a prevalence of chronic conditions and lifestyle behaviours influenced by socioeconomic status, levels of education, housing and community and employment (DoH, 2013). The links between deprivation and health inequalities is well established (WHO, 2008). Latest Pobal data from the HP deprivation Indices[1] for Cork city[2] based on Census figures 2022 (Pobal, 2024) indicates an increase in areas classified as 'extremely disadvantaged' in the North West and Nort Eastern suburbs of Cork City and an overall increase in 'very disadvantaged' areas across Cork City, thus a widening of health inequalities by geographic area within the city since the previous Census in 2016. A greater proportion of the city's population lie in poverty. Health outcomes include cancer, heart disease, stroke, obesity, disability, mental health, chronic conditions including diabetes and asthma, can differ across population groups according to age, socioeconomic conditions, and gender. It is plausible that the Core Strategy, specifically SO 1 Compact Liveable Growth, could change or influence population health across population groups and between geographic areas, in order to reduce health inequalities. It is plausible that the Core Strategy, specifically SO 1 Compact Liveable Growth, could lead to positive changes across communities in Cork city, as has been shown in much of the work of Cork Healthy Cities since 2009 through intersectoral collaboration with Cork City Council (O'Mullane and Cahill, 2024). Promoting health and wellbeing in the communities and setting out where and how (access to resources) people live is crucial to achieving improved health and wellbeing according to national priorities. The supporting objectives to achieve Compact Liveable Growth identifies actions to support and enable quality of life (Objective 2.29), the 15-minute city (Objective 2.10), walkable neighbourhoods (Objective 2.15) and neighbourhood mix (Objective 2.16). The implementation of the Core Strategy could reduce
	Between geographic areas	Yes	

[1] The Pobal HP Deprivation Index assesses the social conditions based on three dimensions (1) Demographic Profile, (2) Social Class Composition (3) Labour Market Situation

[2] The CCDP extended boundary- From 2019 the boundary of Cork city that came under the remit of work within Cork City Council was expanded to nearly five times its previous size to include Douglas, Rochestown, Ballincollig, Blarney and Glanmire. As part of the expansion, the city population grew by 85,000 people to 210,000.

			health inequalities across population groups and geographic areas within the new boundary of Cork city for the local authority. One major challenge to including this determinant within the HIA is locally available data. However, as the distribution of health impacts is central to the work of HIA, population groups according to age and income will be included; national data will be used to make inferences where local data is unavailable.
Health-related behaviours			
Out	Healthy behaviours: smoking, vaping, alcohol consumption	Yes	The built environment is key determinant of health-related behaviours and outcomes through several pathways, such as the encouragement or discouragement of recreational activities, exercise, and residential accessibility to healthier foods (Keralis et al, 2020). Over 35% of all deaths in Ireland in 2019 can be attributed to behavioural risk factors, such as tobacco smoking (20%), dietary risks (13%), alcohol consumption (5%) and low physical activity (3%) (OECD, 2021). In relation to health-related behaviours within the remit of the CCDP, based on available information and professional judgment, the Core Strategy has the potential 'risks to human health' in order to promote health and wellbeing in a manner that could be deemed likely or significant to affect population heath. Particularly in relation to physical activity and dietary behaviours. Across lifestyles that people engage in, the Core Strategy for the CCDP has the potential to influence physical activity, mobility, recreation, and the food environment positively. The CCDP does have remit over planning and supporting mobility, physical activity, community gardening, the provision of open space for recreation and local food production and consumption. It is plausible that the CCDP could influence dietary behaviours influenced by the food environment for population groups within Cork city given the commitment of the CCDP to '…enhancing the sustainability of food consumed in the city by promoting local produce and urban farming' (Chapter 7, pg 227) and Objective 6.8 'community food growing' (Chapter 6). The promotion and support of healthier behaviours, including food environment considerations are enabled by the spatial plan for the city via zoning, land management and expressed commitments across various chapters of the CCDP. It is plausible that with continued support for community gardens, allotments, and local food production and consumption in the city, the CCDP could narrow health inequalities within the general population and across population groups according to age (children, adults, retired people, and elderly), people living with disabilities, people living in lower income groups and geographic areas according to disadvantage. It is plausible that continued support for person-centered mobility, physical activity, the provision of open space for recreation (Chapter 6) the CCDP, could narrow health inequalities within the general population and across population groups according to age (children, adults, retired people, and elderly), people living with disabilities, people living in lower income groups and geographic areas according to disadvantage. Considering the ongoing 'Active Recreation Infrastructure Study[3]', expressed support and consideration of mobility, recreation and the food environment across various chapters, the data required to analyse Health related behaviours against the Core Strategy for the CCDP plus the limited resources available for doing this HIA, this determinant is scoped out.
In	Physical activity	Yes	
Out	Food environment[4] including nutrition	Yes	

[3] CCC has commissioned an 'Active Recreation Infrastructure Study' to assess existing facilities and provide recommendations on policy objectives, the enhancement or expansion of existing facilities, and the provision of new facilities. There is an expressed intention to incorporate the recommendations from the appraisal into the implementation plan. (CCDP, pp. 90)

[4] Food environment refers to "the physical, economic, political and socio-cultural context in which consumers engage with the food system to make their decisions about acquiring, preparing and consuming food" (HLPE, 2017:81)

Safe and Cohesive Communities			
In	Housing- provision & mix Public spaces- buildings & community meeting places Connecting routes, including permeability & walkability	Yes	The built environment is a key determinant of health. The Core Strategy sets out the long-term vision for the city and guides where and how development should happen within and between geographical communities. It identifies where proposed growth will occur on a neighbourhood basis in terms of housing, employment, and key infrastructure required to accommodate growth targets and improve quality of life, as a pathway to health outcomes. The planning of communities is an important health determinant and a key objective of the Core Strategy. In relation to safe and cohesive communities based on available information and professional judgment, the Core Strategy for the CCDP has the potential to change 'risks to human health' in order to promote health and wellbeing in a manner that could be deemed likely or significant to affect population heath. Supporting objectives within the Core Strategy directly relevant to safe and cohesive communities include Objectives: 2.10 (The 15 minutes city), 2.11 (Low Carbon City), 2.12 (Mix of Uses), objective 2.16 (Neighbourhood Mix), Objective 2.17 (Neighbourhood Design), Objective2.23 (Housing Supply), Objective 2.35 (Development of Hinterland Settlements). A thematic analysis of the scoping workshop with the HIA Steering Group found that the topic of community health and wellbeing reoccurred throughout discussion of the nine determinants of health (column 1 of this table). Connected communities/neighbourhoods is a major goal of the Core Strategy. The following planning themes are relevant to the Core Strategy: Housing provision and mix, employment, severance, permeability, open space, active travel/ mobility, community identity and society, safety. The Core Strategy of the CCDP could be judged as changing population health by promoting social inclusion[5] and improving quality of life. The '15-minute city' and 'walkable neighbourhoods' are two key approaches offering sustainable building blocks for land use planning, central to delivering compact liveable growth in the City, which can promote safe and cohesive communities, connectedness, and permeability. People experiencing social exclusion in Ireland often have more complex health needs and poorer access to healthcare than the general population (Siersbaek et al., 2023). Social exclusion is associated with poorer mental health including dementia, premature death, risk for cardiovascular disease and stroke. Reducing social exclusion is a national priority for public health policy in Ireland, according to the Healthy Ireland Framework (2013-2025). Addressing and decreasing social exclusion would reduce the risk of health outcomes across population groups according to age, income, and people living in lower socioeconomic conditions which is also associated with their geographic community. What we would like to include as indicators of safe & cohesive communities includes the following: Housing- provision & mix
	Social exclusion, crime & safety	Yes	

[5] Social inclusion is defined as "achieved when people have access to sufficient income, resources and services to enable them to play an active part in their communities and participate in activities that are considered the norm for people in society generally" GOVERNMENT_OF_IRELAND 2020. Roadmap for Social Inclusion, 2020-2025. Dublin: Department of Social Protection..

			Public spaces- buildings & community meeting places Connecting routes, including permeability & walkability Poverty, social exclusion, crime & safety Given that the purpose of the Core Strategy is to set the long-term vision for the city and to guide where and how development should and will happen, and the supporting objectives directly related to the provision of safe and cohesive communities in achieving Compact Liveable Growth this determinant is scoped in for this HIA. This is with due acknowledgement of resources available to the HIA team.
Socio-economic conditions			
Out	Education	Yes	In relation to socio-economic conditions, based on available information and professional judgment, the Core Strategy for the CCDP has the potential to change 'risks to human health' in order to promote health and wellbeing in a manner that could be deemed likely or significant to affect population heath, in relation to access to education through connectivity in the city, employment type and location, mobility, housing provision and mix. One priority for Cork city as well as other cities in Ireland is employment location according to where people are living. An example provided at the scoping workshop was that a large proportion of people living in Carrigaline, work outside the area, and a large proportion of people working in Apple in Knocknaheeny in Cork city do not live in the area. Hollyhill is an area identified as a strategic area for employment in the CCDP. It is plausible that the Core Strategy for the CCDP could positively change population health for the better through improved travel options for those accessing educational opportunities and settings, in particular for those living in car dependency areas and those without adequate/ reliable transport options. Access to education and length of time in education is associated with lifelong health and wellbeing, wider range of option for employment and higher income. It is estimated that an additional 31,000 jobs will need to be created in Cork City by 2028 (CCDP, pp.223) and the Core Strategy map identifies the zoned land to accommodate this employment growth (pg. 48). It is plausible that the Core Strategy for the CCDP could support and enable improved employment opportunities through objective 2.16 (Neighbourhood Mix), Objective 2.12 (Mix of Uses), Objective 2.10 (The 15-minute City), Objective 2.14 (Walkable Neighbourhoods), Objective 2.34 (Supply of Zoned Land), and Objective 2.19 (Urban Area-based Planning) across population groups in Cork city. Employment and health are inextricably linked, work is a key determinant of health (Frank et al, 2023), unemployment is a primary cause of deprivation, and access to sufficient income is central to facilitating social inclusion (GoI, 2020).
In	Employment	Yes	

<table>
<tr><td></td><td></td><td></td><td>Health outcomes between education and the Core Strategy for the CCDP are deemed not probable given the influence of other factors on educational access and services, beyond the remit of the CCDP. Health outcomes between employment and the CCDP are deemed probable given the priority of local economy within the CCDP.

The Core Strategy for the CCDP (p.34) states “lands have been zoned to accommodate the future demand in a manner that positively responds to wider challenges that includes targeting neighbourhoods where there are relatively high levels of unemployment, creating inclusive and sustainable communities and anticipating likely market trends over the period to 2028.” This is a statement of the goal in terms of economic growth with further detail on planning for economic growth is detailed in chapter 7 of the CCDP.

This topic of employment may be dealt with under ‘safe and cohesive communities’ given the importance of social inclusion in achieving safe and cohesive communities. If not, due to limited resources to do this HIA, future work examining the health impacts of objectives related to employment in the CCDP warrants further investigation.</td></tr>
<tr><td colspan="4">Environmental Conditions; Biodiversity and Climate action</td></tr>
<tr><td rowspan="6">IN the mitigation measures & findings from SEA, Appropriate Assessment and Flood Risk Assessment done on the CCDP 2022-2028</td><td>Air quality</td><td>Yes</td><td rowspan="6">In relation to environmental conditions, biodiversity, and climate action, based on available information and professional judgment, the Core Strategy for the CCDP has the potential to change ‘risks to human health’ in order to promote health and wellbeing in a manner that could be deemed likely or significant to affect population heath. Factors relevant to the Core Strategy of the CCDP include capacity of environmental infrastructure, the quality of the natural and built environment (air quality, soil, noise, water, landscape) and mobility.

Air quality associated with traffic in the city, connectivity routes and the Core Strategy for the CCDP are deemed plausible in terms of health outcomes including respiratory illness and the extent of physical activity and mobility. Cork City Council’s Blue and Green Infrastructure Strategy, the Council’s Climate Change Adaptation Strategy, and the Strategic Environmental Assessment conducted on the CCDP suggests that adequate mitigation is in place to offset risks to human health as a result of environmental conditions, although the experience of people living in geographic communities according to disadvantage and population groups across age, disability and lower income is unknown and deserves further study. The co-benefits of health between climate action and population health in the city warrants further study also. The association between climate action and population health is strongly associated with reduced risk for cancer and heart disease with a shift to plant-based diets and the opportunity to decrease reliance on car use, reduce air pollution and increase physical activity, encouraging the use of active travel and public transport use in Cork city (Godsmark et al. 2024). Health outcomes and health gain in terms of improved air and water quality, lower pollution, protecting biodiversity, increased physical exercise, enjoyment of public space, respect and care for the environment, aesthetic pleasure derived from enjoyment of the physical environment and strengthened mental health and resilience (Thomson and Roach, 2023).</td></tr>
<tr><td>Water</td><td>Yes</td></tr>
<tr><td>Soil</td><td>Yes</td></tr>
<tr><td>Noise and vibration</td><td>Yes</td></tr>
<tr><td>Climate action</td><td>Yes</td></tr>
<tr><td>Biodiversity</td><td>Yes{Godsmark., 2024, Health in the Climate Emergency with Reflections from Cork`, a Healthy City}</td></tr>
</table>

			This determinant has been scoped out of the HIA however due to mitigation already in place for this determinant and the limit of resources to do this HIA
Health and social care services			
Out	Access to health and social care services	Yes	In relation to health and social care services, based on available information and professional judgment, the Core Strategy for the CCDP has the ability to change 'risks to human health' in order to promote health and wellbeing in a manner that could be deemed likely or significant to affect population heath. The scoping workshop with the HIA Steering Group also brought up the issue that services can include diversity of retail and availability of local produce for the local population. Improved health outcomes are associated with equitable and accessible health/ medical care services in the city. Lack of accessibility of these essential services leads to inequalities for population groups who cannot easily access services due to location inaccessibility without a car or lack of access due to public transport options. Co-benefits of health between employment, community cohesion and population can result when a diversity of retail is available for communities across the city and local produce is available for the local population in the city. This determinant has been scoped out of the HIA however due to mitigation already in place for this determinant and the limit of resources to do this HIA (come back to this).

Acknowledgement: Many thanks to Dr James O'Connell for sharing his work and learnings in doing the HIA on the Galway Transport Strategy according to the Institute of Public Health HIA guidance, during a webinar on 14.2.2024. Dr O'Connell's work was helpful to us in creating the template for this scoping table.

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4. Terms of Reference for the HIA remit

Adapted from IPH HIA guidance, page 102. Confirmed following the meeting with HIA Steering Group on 13.3.2024

HIA remit, planning, and governance	**Record of decision**
Title of the proposal on which the HIA is being conducted	Cork City Development Plan (2022-2028)
Type of proposal (legislation, policy, plan, programme, or project)	Policy
Strategic or project level/ standalone HIA or integrated with another assessment?	Strategic/ standalone HIA
Aims of the HIA	1. To identify the potential significant effects of the Cork City Development Plan (2022-2028) on population health 2. To identify opportunities and strengths for health gain in the Plan for improving health equity and reducing health inequalities. 3. To identify opportunities for reducing negative health impacts of the City Development Plan on population health.
Scope of the HIA	1. To identify the potential significant effects of the Core Strategy of the Cork City Development Plan (2022-2028) on population health, with a focus on safe and cohesive communities 2. To identify opportunities and strengths for health gain in the Core Strategy of the Cork City Development Plan (2022-2028) for improving health equity and reducing health inequalities in creating safe and cohesive communities in Cork. 3. To identify opportunities for reducing negative health impacts of the Core Strategy of the Cork City Development Plan (2022-2028) on population health, with a focus on safe and cohesive communities. 4. To relate findings and mitigation measures from the Strategic Environmental Assessment, Appropriate Assessment and Flood Risk Assessment conducted on the Cork City Development Plan (2022-2028) to the HIA, as appropriate.
Principles underpinning the HIA	The principles that underpin HIA as outlined in the Gothenberg Consensus paper for HIA (1999): -Democracy -Equity -Ethical use of evidence -Sustainable development
Boundaries of the HIA (e.g. geographical and/ or population scope)	Geographical and population groups according to vulnerability due to age (over 65 years & under 18 years) and income (low income)

Timescales (e.g. HIA outputs and temporal scope)	Within the period of the current city development plan, 2022-2028. Latest census data from 2022 will be used.
Non-negotiable aspects of the proposal	n/a
Steering group membership:	**Membership** Chair: Mary O'Mahony, HSE Advice and comment: Tadhg O'Mahony, EPA Advice and comment: Liz Ahern, Mayfield Community Development Project Advice and comment: Kevin O'Connor, Cork City Council Advice and comment: Darren McAdams-O'Connell, Transport Mobility Forum Advice and comment: Stephen Murphy Cork City Council Advice and comment: Martin Davoren, Sexual Health Network Advice and comment: Andrew Sulley, HSE Advice and comment: Deirdre Fitzell HSE Advice and comment: Marie Ryan, UCC Advice and comment: Gina Johnson, Climate Action Team, CCC Proponent: Cork City Council HIA Working Group: Karen O'Mahony (Cork City Council), Monica O'Mullane, Tara Kenny and Kirsty Nash (UCC)
Steering group role and any limits on remit (e.g. in signing off aspects of the HIA and the end point of the steering group)	Please see document - Terms of Reference for the Governance of the Health Impact Assessment on the Cork City Development Plan 2022-2028
Main stakeholders: • Who is likely to be affected? • Are key stakeholders represented on the steering group or as formal consultees?	Population of Cork city within new boundary since 2019. Population groups identified as likely to be affected with vulnerability due to age and income. Steering group includes members representing various relevant statutory, academic and community organisations. In particular, the community organisations on the steering group ensure the priorities of people most likely to be affected by the city development plan are represented in the group. The general public will be involved and engaged on health impacts at a public event planned as part of the Analysis stage of the HAI on 22nd April 2024.
Key informants for the HIA: • Who can provide useful information on how the proposal is likely to affect health? • Have any conflict of interest been declared? • Have approaches to manage any COI been agreed? E.g. proponent-funded research	The proponent of the policy, who also sit on the steering group and working group of the HIA, will provide useful information on how the proposal is likely to affect health The steering group will inform the provide useful information on how the proposal is likely to affect health. Conflicts of interest have been declared in writing as part of the consent forms for the research project (HIA-IM).

What methods will be used to determine:	We will use the methods as outlined in the IPH HIA guidance.
Who will be responsible for gathering evidence in the following areas? (as applicable): • literature review • health priorities review • community profile/ baseline data • health policy context review • stakeholder consultation • regulatory/ standards compliance review • relevant monitoring indicators	Working group is responsible for gathering the evidence and presenting analysis back to the steering group, with a view to making decisions for the reporting of the HIA and resulting recommendations.
Who will be responsible for appraising the evidence and forming conclusions and recommendations? Who will provide review?	The working group will appraise the evidence and present it back to the Steering Group at meetings on 25th April and 31st May. Following responses to questions in relation to evidence, we will develop recommendations together for a draft report, which will be discussed at the 27th June meeting. Dr Margaret Douglas, Public Health Scotland, has agreed to provide a review of the HIA report.
How will the results of the HIA be presented? (e.g. checklist/ reasoned narrative/ discussion>	Results will be presented in the HIA report, using tables and narrative discussion.
How will the results of the HIA be disseminated?	The HIA results will be disseminated in report form to Cork City Council Planning Department to Kevin O'Connor and Karen O'Mahoney. It will be disseminated from Steering Group members to their respective organisations, if members wish to disseminate the report. The results of the HIA will be disseminated as part of an academic journal that the HIA-IM research team (Monica Tara and Kirsy) will lead on. Co-authors from the HIA are welcome.
Who will be responsible for monitoring and adaptive management recommended by the HIA?	Monica O'Mullane will be responsible for monitoring progress of the HIA recommendations that will be submitted to Cork City Council on the Cork City Development Plan (2022-2028).
What evaluation will be undertaken of the HIA, when and by whom? (e.g. process evaluation as appendix to the HIA report)	To be decided by the Steering and Working group at the end of the HIA.
How will the HIA budget be spent?	There is no standalone budget associated with this HIA. There is money from the HIA-IM research project that is used to fund capacity of personnel on the working group; fund the public involvement event on 22nd April 2024; and the publication of the final HIA report.
Operating arrangements for the steering group	Outlined in the Terms of Reference for the HIA Steering Group.

Timetable of events (adopted from IPH HIA guidance, 2009)	**What**	**When**	**Who**
	Public engagement event	22.4.2024	Led by Dr Liz Green Co-facilitated by Working Group and Bernie Connolly, Cork Environmental Forum
	Steering Group meetings, to discuss findings from HIA Analysis stage to create recommendations and the HIA report	25.4.2024 (UCC) 31.5.2024 (Teams) 27.6.2024 (UCC) 25.7.2024 (Teams) 19.9.2024 (TBC-in person)	Steering and Working group of the HIA

5. Protocol for data gathering as part of the HIA Analysis stage

ANALYSIS STAGE OF HIA
PROTOCOL FOR GATHERING AND COLLATING THE EVIDENCE FOR THE HIA ON THE CORK CITY DEVELOPMENT PLAN (2022-2028)

Created by Monica O'Mullane

V 1: 26.4.2024; V 2: 30.4.2024

Acknowledgments

We acknowledge using the Institute of Public Health HIA guidance (2021), and conversations with Dr Joanna Purdy and Ben Cave, for helpful insight into using the guidance for the analysis stage. Our sincere thanks to Dr Margaret Douglas (Public Health Scotland) for her comments on the overall approach outlined below, and for directing us to useful literature reviews conducted by Public Health Scotland. We acknowledge working in a similar approach to creating tables (steps 2 and 3) as done by WHIASU/ Dr Liz Green when they carry out HIAs. Our thanks to Liz for sending the blank table examples for the Analysis stage of the HIA (tables for steps 1 and 2).

Research team for the analysis stage of the HIA

The research team for gathering the data includes Tara Kenny, Kirsty Nash, and Monica. Marie Ryan, member of the HIA steering group and lecturer in Economics, UCC, will come on board to gather data for the employment determinant of health. Any publications or conference presentations generated from this gathering data phase will include all four researchers.

PURPOSE

The purpose of this document is to outline the process for gathering data for the evidence stage of the HIA-Analysis Stage. This document will also clarify the meaning of terms used for gathering data in the excel sheets in file excel named *Analysis-gathering the data.* The terms inserted the excel file (please refer to TEMPLATE sheet in the file) are taken from the HIA IPH guidance (p. 47), as outlined in figure 1 (at end of this document). Terms used are described in table 2.

The following is the wording of the policy scope for this HIA:

Strategic Objective 1- Compact Liveable Growth. 2.10: 15-minute city

"To support the delivery of a 15-Minute City that supports Compact Liveable Growth by creating vibrant local communities that can access all necessary amenities within a 10-minute walk/cycle and access workplaces and other neighbourhoods with a 15-minute public transport journey. Implementation will include walkable neighbourhoods, towns and communities with mix of uses, house types and tenure that foster a diverse, resilient, socially inclusive and responsive city. This includes support for public and active travel infrastructure projects and services and enhanced neighbourhood permeability. Strategic infrastructure and large-scale developments shall demonstrate how they contribute to a 15-minute city and enhance Cork City's liveability and accessibility." Page 63 of the Cork City Development Plan (2022-2028)."

APPROACH TAKEN FOR SCIENTIFIC LITERATURE SEARCH

The approach taken for searching and gathering scientific literature needs to be carried out in an intuitive way. We don't have time to do exhaustive systematic searching, but we can find scientific literature to build the case of each of the health impact pathways, starting with the hypotheses- which are the result of populating tables 1 and 2. I suggest everyone starts with a document [6] created by PHS in 2022, which includes a collection of scientific literature including reviews that could be a starting point for articles search; any gaps in the evidence could be found thereafter in a search in PubMed (recommended in IPH guidance). This is an appropriate approach to take given the short time for this whole process.

[6] Evidence behind Place Standard Tool and Place and Wellbeing Outcomes - Evidence behind Place Standard Tool and Place and Wellbeing Outcomes - Publications - Public Health Scotland

STEPS IN THE PROCESS

There are two steps in this process, leading to evidence gathered on the potential likelihood of impact of the 15-minute city, sub-objective 2.10 of the Cork City Development Plan (2022-2028).

The steps are guided by the hypotheses as created from the determinants of health (table 1 of this Protocol). This list of determinants was agreed upon by the HIA Steering Group; some changes have made to these determinants, as noted in Box 1.

Changes to the determinants may happen during the process of evidence gathering given the nature of intersecting determinants e.g. social inclusion and community meeting places.

Table 1 also includes research questions to guide the search for scientific evidence. Although table 1 is to guide the search for scientific literature, please use this to search for grey literature that may be helpful e.g. ESRI reports; reports and resources from Cork child-friendly cities; Cork age-friendly cities; Cork Healthy Cities action plan (2020-2030). Any HIAs done on specific topics (e.g. housing) would be helpful, if you find any such published HIAs.

Each person should check the full wording of objective 2.10 and the City Development Plan in relation to their assigned determinant, for improved context. Please use this document to put any questions you'd like to ask Karen O'Mahony when we meet her on Friday 10th May.

** Change to process. Updated on Thursday 16th May 2024**

We met on Wednesday 15th May as part of a series of planned 3 x 3 hour sessions in person (15th, 16th, 17th May 2024). We four met on Wednesday 15th for two hours as part of the first planned session. It became clear that completing the tables in steps 2 and 3 of this document by ourselves, writing a short (half page) overview of the literature for the determinant for the three population groups and drafting some initial recommendations, and then meeting together with these documents completed, made more sense in terms of time and work efficiency.

We completed the tables with Marie on 'access to workplaces' and Marie will fill in the evidence columns. It was a very good exercise in demonstrating how to assess likelihood based on the literature we found.

The plan is that the HIA SG will be sent all our tables and write up on 22nd May before our online meeting on 30th May. The purpose of that meeting is to discuss the data collated by the UCC researchers in preparation for creating HIA recommendations at the June meeting.

Box 1: changes made to the determinants as we go along the evidence-gathering process

Decisions on determinants and team allocation.
26th April 2024[7]
This is the list of determinants, decided upon by the steering group, with research team members allocated to each determinant
To tighten the search, we take out the highlighted determinants for now as they may come up in the lit search for other determinants. Poverty and social exclusion could be shelved for now and come back later, addressing as a population group.

Housing- provision & mix- Tara
Public spaces and buildings for communities to meet- Monica
Include social inclusion here as a hypothesised result of access to community meeting places
Connecting routes, including permeability & walkability- Monica
Crime & safety- leave it and check if comes in under connecting routes
Lighting, alleyways, SG
physical activity- leave for now; come in at end
Social exclusion and poverty- Tara. I suggest we leave this for now and come back to it after the May meeting and address it as a population group- people living in extreme disadvantage in Pobal areas.
Employment- Marie

[7] Every time there is a change, let's record it with a new paragraph with date as a heading

Determinant	Wording from objective 2.10	Person responsible for this determinant	Research question	Hypothesis	Comment
Housing-provision & mix	House types, tenure: House types and tenure that foster a diverse, resilient, socially inclusive, and responsive city.	Tara	What is the impact of house type on health? What is the impact of house tenure on health?	Appropriate housing type (apartment, duplex) to the needs of the occupant is related to good health outcomes. Secure housing tenure is related to good health outcomes for older people children & adolescents; people living on low-income.	Do housing types meet the health needs of population groups? What is the health impact o housing type (if any literature?) What is the impact of tenure on health? Is there evidence that tenure impacts health? How does the objective relate to the evidence?
Public spaces and buildings for communities to meet (easier wording-Monica) (Public spaces-community meeting places)	Creating vibrant local communities that can access all necessary amenities.	Monica	What is the impact of community meeting places and buildings on health?	Accessible community meeting places and public spaces for meeting have a positive impact on health outcomes and on strengthening social inclusion.	What does the evidence say about meeting places? This comes up in the public engagement evidence which is brilliant.
Connecting routes, including permeability and walkability	Permeability; walkable neighbourhoods, towns and communities; accessibility; public and active travel				
	Need to change question to health, impact, neighbourhood, design as permeability raises no relevant results (Mon,	Monica	What is the impact of neighbourhood permeability on health?	Neighbourhood permeability impacts positively on health outcomes. Neighbourhood design impacts positively on health.	What does the evidence say about permeability on health? Anything regarding different impacts on different groups?

	13.5.2024) (searched Pubmed, Ebsco) enhanced neighbourhood permeability Enhanced neighbourhood design for health including permeability		Changed to What is the impact of neighbourhood design on health?		What does the evidence say about neighbourhood design on health? Anything regarding different impacts on different groups?
	local communities that can access all necessary amenities within a 10-minute walk/cycle TO DO	Monica	What is the impact of accessible amenities for communities?	Access to amenities impacts positively on community health outcomes.	What does the evidence say about access to amenities on health outcomes for communities? Anything regarding different impacts on different groups?
	Walkable and physical activity	Tara	What is the impact of walkable neighbourhoods on health?	Walking in supportive environments as part of daily living impacts positively on health.	What does the evidence say about walking environments and impact on health? Anything regarding different impacts on different groups?
	Modes of travel (public transport and active travel)	Monica & Kirsty	What is the impact of modes of travel on health?	Different modes of travel including accessing public transport and active travel modes, impact positively on health (refer to Scottish evidence on this).	What does the evidence say about modes of travel and impacts on health? Anything regarding different impacts on different groups?
Employment	access workplaces … with a 15-minute public transport journey.	Marie	What is the impact of shorter commuter/ travel times with public transport on health?	Accessible workplaces with short travel times by public transport improves health by walking to and from bus stops, increases social interaction, and decreases car reliance.	What does the evidence say about access to workplaces on health? Anything regarding different impacts on different groups? People living on low income, older people (older than 65 years should be retired) and children and adolescents (teenagers would be working/ looking to access workplaces)?

Table 1: Determinants of health, hypotheses, and responsible researcher for each task

Step 1- Gathering the data

Gather data into the excel file.

Each researcher uses the sheet entitled *TEMPLATE-safE&cohesive comms* in the excel file entitled *Analysis- gathering the data.* Please download your own copy of this excel file with a sheet for each sub-determinant that you are examining.

This is where you put all your data and what you will refer to when we are doing steps 2 and 3 together. We complete steps 2 and 3 together in a consensus-building way. You may create an extra sheet in the excel file for storing systematic review references or references to any relevant grey literature. For step 1 you work alone but feel free to confer with other researchers on the team regularly. You don't need to send your own excel file to the research team before meeting, just please bring your laptop with the file and your data gathered (references etc) to the 3-hour sessions. However, we can keep these excel files on record afterwards, on the project shared folder. For these 3-hour sessions, one person populate the tables; one person can scribe any points of interest from discussion and any difference of opinion.

There are 8 hypotheses for 9 hours; let's plan one hour per hypothesis and we can see how that goes. Marie will join us on Wednesday 15th May at 1pm (venue TBC).

Table 2 includes the terms used in the excel file to guide step 1, description of them, using the relevant wording to the objective 2.10.

Be sure to make notes of any observations or minor adjustments made during the gathering phase and keep a record of the time you spend on this task.

Term used in the excel sheet	Description of term
Policy objective	Include the words that relate to the specific determinant
Research question	A research question is created for each determinant. RQ states the specific issue to focus on and outlines the task that you need to complete.
scientific literature - search string	A combination of keywords you enter into the search box of a library database or search engine. E.g educat* AND student* gives results for “education, educator, educating” and “student, students”
Change to baseline conditions for the population (over 65s; under 18 years; low-income groups)	This refers to the potential change to baseline conditions as a result of implementing the 15-minute city for the three selected population groups When doing steps 2 and 3, take account of any mitigation that has been secured, if known although regarding the objective 2.10 we don’t know of implementation since 2022.
health priorities according to local policy	Local- are there already existing local policy priorities for the population group in the CCDP?
public involvement input from 22nd April. Consultation Responses (what it's called in the IPH guidance)	Include here any themes on the relevant determinants of health or health outcomes. Make an observation about- is there a consensus of views; or mix of views, among public participants.
Health policy context	Could a change due to the CCDP, objective 2.10, have an influential effect on the ability to deliver current health policy. Check Healthy Ireland, 2013-2025, current government public health policy, for any priorities that could be affected (-/+) in the implementation of the 15-minute city on the population group.
Regulatory thresholds- page 47- relevant SEA, AA, FRA mitigation measures & findings	MONICA WILL DO THIS WITH TADHG O’MAHONY, make appointment to meet early June, decide at May meeting with Tadhg Could a change, due to the implementation 2.10, result in a regulatory threshold or standard being crossed or nearly crossed? Could it strengthen the implementation of a standard/ measure? (-/+)
Health outcomes	What health outcomes were included in the review?

Table 2: Used questions in IPH guidance, page 47

Step 1: Populate this table, based on data gathered

Potential Determinants of Health and Wellbeing affected by SO 1, 2.10, include in this table below as hypotheses. Using hypotheses in this table will make it easier to create the pathway of health impact e.g. accessible community meeting places for adolescents is likely to have a positive significant impact on social and mental health.

Population groups- create three tables for three population groups. We may include other population groups e.g. people living with physical disabilities, people using wheelchairs/ buggies, depending on literature search and time.

People living on low income

Older people (over 65 years)

Children & adolescents (5- 18 years)

Hypothesis	**Potential Impact i.e positive/opportunity** **Or/ and** **negative/unintended consequence**	**Health sensitivity to the population** (use IPH model page 144)			**Magnitude of the impact** (use IPH model page 145)			**Health significance (sensitivity + magnitude)** (use IPH model page 148)			**Evidence** i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
Appropriate housing type (apartment, duplex) to the needs of the occupant is related to good health outcomes.		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Secure housing tenure is related to good health outcomes for older people children & adolescents; people living on low-income.											

Accessible community meeting places and public spaces for meeting have a positive impact on health outcomes and on strengthening social inclusion.											
Neighbourhood permeability impacts positively on health outcomes.											
Access to amenities impacts positively on community health outcomes.											
Walking in supportive environments as part of daily living impacts positively on health (utility activity).											
Different modes of travel including accessing public transport and active travel modes, impact positively on health.											
Accessible workplaces with short travel times by public transport improves health by walking to and from bus stops, increases social interaction, and decreases car reliance.											

Step 2: Populate this table, using data gathered from step 1

This table (below) is a continuation of the table in step 1, to generate evidence on the scale of impact.

<u>Population groups (create three tables- for each of the population groups below)</u>

People living on low income

Older people (over 65 years)

Children & adolescents (5- 18 years)

Hypothesis	**Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (probable; possible; confirmed)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (probable; possible; confirmed)**	**Potential impact ie. Positive or negative (narrative)**
e.g Appropriate housing type (apartment, duplex) to the needs of the occupant is related to good health outcomes.	E.G. Appropriate housing type will lead to improved health outcomes for older people (e.g.) as they won't need to climb stairs; mobility issues higher prevalence in this group.	**Positive/ opportunities**			**Negative/ unintended consequences**			

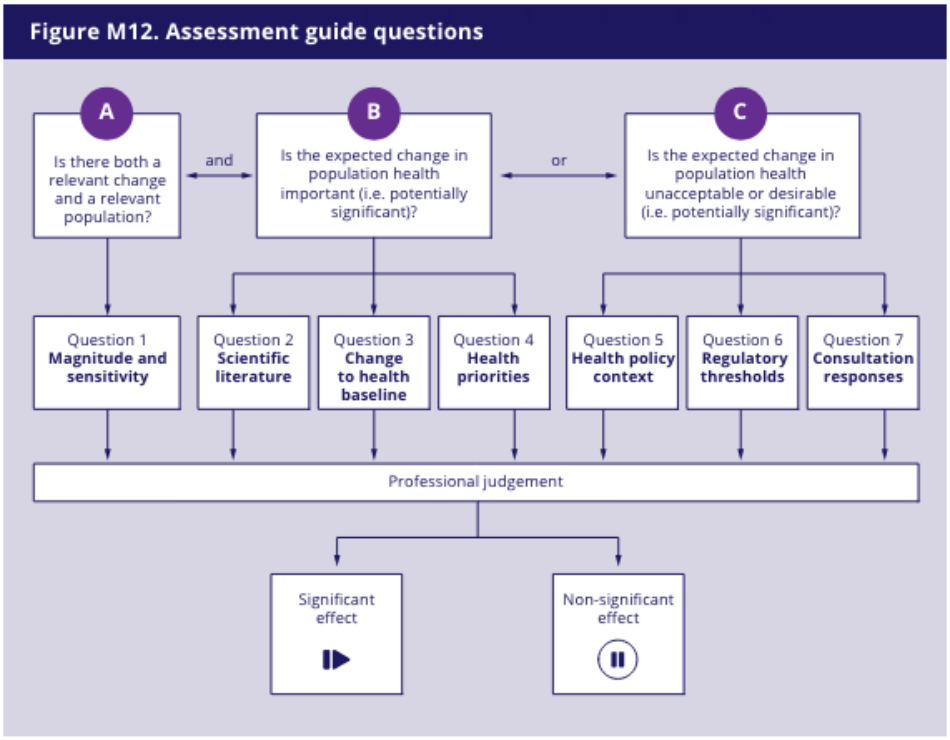


Figure 1: Analysis stage. HIA IPH guidance, page 47

QUESTIONS FOR THE ANALYSIS STAGE OF THE HIA, USED IN TANDEM WITH FIGURE 1

Q1. Is the magnitude of change due to the proposal high or medium, and is the sensitivity of the affected population high or medium? Take account of vulnerable groups when considering the sensitivity of the affected population.

Q2. Is there a causal relationship, or a clear association, between changes that would result from the proposal and changes to health outcomes? Focus on relationships or associations with sufficient effect size to meaningfully influence population health.

Q3. Could the proposal result in an important change in the health baseline? This could be a substantial change or it could be a small change in a large or highly vulnerable population. Take account of mitigation that has been secured.

Q4. Have health priorities been set for the relevant study area that are of specific or general relevance to the determinant of health or population group affected by the proposal?

Q5. Could changes, due to the proposal, have a substantial or influential effect on the ability to deliver current health policy?

Q6. Could a change, due to the proposal, result in a regulatory threshold or standard being crossed or nearly crossed?

Q7. Have themes emerged, in consultation for the proposal, on relevant determinants of health or health outcomes? Is there consensus, or a mix of views, among stakeholders?

6. Questions posed in the Quality Review of the HIA, carried out by Dr Margaret Douglas (Public Health Scotland) once the HIA report was finalised.

Questions to consider
Was the HIA done prospectively, before implementation of the proposal?
Were the aims and the scope of the HIA clearly defined?
Was the HIA conducted from an impartial stance, rather than a predetermined position on the proposal?
Did the assessors use a systematic way to identify potential health impacts?
Were relevant stakeholders engaged appropriately?
Does the HIA include a profile of health, health determinants and susceptible populations in the potentially affected communities?
Are the methods and sources of evidence clearly stated and appropriate to the assessment questions?
Does the HIA clearly present and characterise the health impacts, including pathways and affected populations for each?
Does the HIA highlight differential impacts and implications for health inequalities?
Are the impacts clearly supported by the evidence presented?
Do the recommendations flow from the assessment of impacts?
Are the recommendations feasible, clearly specified and do they define who should implement them?
If a Health Management Plan is included, are the actions SMART (specific, measurable, achievable, resources, time-bound)?
Is the report logically structured and clearly written?
Have the recommendations been accepted and implemented?
In terms of the composition of the Steering Group and Working Group, are there any observations around sectoral interests involved, given the focus of this HIA? Are there any sectoral interests missing? Any other comments on the roles of the Steering Group and Working Group?
Any other comments?

Overall assessment

Areas of good practice
Suggested improvements for future HIAs

7. Tables created to assess likelihood and significance of potential positive and negative/ unintended health impact

7.1 Housing

OLDER PEOPLE
STEP 1

Hypothesis Older people	**Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence**	**Health sensitivity to the population** (use IPH model page 144)			**Magnitude of the impact** (use IPH model page 145)			**Health significance (sensitivity + magnitude)** (use IPH model page 148)			**Evidence** i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Adequate and well-designed housing, including apartments, is associated with good health outcomes Good quality housing is related to good health outcomes and improving existing housing stock will achieve positive health gains, particularly for vulnerable groups (older, younger, and low income) Design should be based on 'life time homes'	(--) Poor housing design predisposed older people to accidents and injuries (--) Poor quality housing is detrimental to health (++) accessibility of buildings important consideration for older adults who spend more time at home and in their neighbourhood	High			High			High			Public engagement event 22nd April &: Scoping workshop report 31st Jan 2024 -safety concerns; footpaths, roads, urban environment and walkability/utility activity. Richards et al 2023; Ige et al, 2018; Bever et al. 2021 LDA: Statement of Strategy: 2024-2028 – Land Development Agency
Secure tenure protects health and poor quality and	(--) Housing insecurity and lack of housing	High			High			High			Richards et al. 2023; Humes et al. 2023; Lancet editorial, 2024

lack of affordable housing and poor quality housing disproportionately affects lower income and disadvantaged populations.	affordability was a psychosocial stressor that affected both physical and mental health (--) Supported renters[3] have the poorest health outcomes, particularly those who are older and unemployed (--) Insecurity of tenure (e.g., in private market rental accommodation) and anxieties around rent and mortgage payments have also been shown to negatively impact mental and physical health										

STEP 2

Hypothesis	Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented Re: Potential impact ie. Positive or negative (narrative) Narrative- write up)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)
		Positive/ opportunities			**Negative/ unintended consequences**		
		high	Short, medium and long term particularly given the aging population	Confirmed	High	Short, medium and long term particularly given the aging population	Confirmed

YOUNG PEOPLE
STEP 1

Hypothesis Young people	**Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence**	**Health sensitivity to the population** (use IPH model page 144)			**Magnitude of the impact** (use IPH model page 145)			**Health significance (sensitivity + magnitude)** (use IPH model page 148)			**Evidence** i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Adequate and well-designed housing, including apartments, is associated with good health outcomes. Good quality housing is related to good health outcomes and improving existing housing stock will achieve positive health gains, particularly for vulnerable groups (older, younger, and low income)	(--) Poor housing design predisposed children to accidents and injuries (--) Lack of shared recreational space, private gardens were found to have a negative impact on mental health (--) Lack of adequate housing and is detrimental to child development - particularly educational achievement (--) Living in inadequate housing and in more disorderly neighbourhoods have worse health and developmental outcomes at the age of nine than their peers	High			High			High			Cost and affordability of housing Public engagement event 22nd April &: Scoping workshop report 31st Jan 2024 Laurence et al 2023; Russell et al. 2021; Hume et al 2023; Ige et al. 2018; Richards et al. 2018; Howden-Chapman et al. 2022 LDA: Statement of Strategy: 2024-2028 – Land Development Agency

	Also over crowing and communicable disease – TB on the way back (--) Children, people with chronic illnesses or disabilities, and older people are more vulnerable to the indoor environment as they spend more time at home (--) children living in cold, damp houses are more likely to be hospitalised for acute respiratory illnesses and re-admitted (--) In children, the odds of asthma and asthmatic symptoms, such as wheezing and cough, are two or more times greater in damp houses than in non-damp ones Solid fuel and Carbon Monoxide, fuel poverty										
Secure tenure protects health and poor quality and lack of affordable housing and poor quality housing disproportionately affects lower income and disadvantaged populations	(--) Housing insecurity and lack of housing affordability was a psychosocial stressor that affected both physical and mental health	HIGH			High			High			Richards et al. 2023: Laurence et al 2023; Russell et al. 2021; Hume et al 2023; https://www.esri.ie/publications/fuel-poverty-in-ireland-an-analysis-of-trends-and-profiles

	(--) Housing circumstances (e.g. housing tenure and single-parent households) were determinants of adolescent health and wellbeing (--) Children in lone-parent households were still more likely to live in private rented and social housing, and to experience heating deprivation and neighbourhood disorder. Fuel Poverty a huge issue (--) Problems of housing quality are more common among those living in the private rented and social rented sectors (--) Children with parents out of employment, who have lower incomes, less education, and who live in rented accommodation, are more likely to live in poorer housing conditions More likely to have lead distribution pipes for water										

Step 2

Hypothesis	Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented Re: Potential impact ie. Positive or negative (narrative) Narrative- write up)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)
		Positive/ opportunities			**Negative/ unintended consequences**		
		high	Short, medium and long term particularly given the young age of population	Confirmed	High	Short, medium and long term particularly given the young age if population	Confirmed

People living on low-income
STEP 1

Hypothesis **Low income**	**Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence**	**Health sensitivity to the population** (use IPH model page 144)			**Magnitude of the impact** (use IPH model page 145)			**Health significance (sensitivity + magnitude)** (use IPH model page 148)			**Evidence** i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Adequate and well-designed housing, including apartments, is associated with good health outcomes.	(--) Lack of adequate housing impacts on individuals physical and psychological health and well-being (--) Lack of adequate housing impacts on individuals disrupts family life and is a barrier to accessing/ maintaining employment, education, and other services. (++) Adequate housing crucial to build sustainable communities and civic society (--) Poor conditions of individuals' homes affects their health in a statistically and economically significant manner, especially when these individuals get older	high			High			High			Russell et al. 2021; Palacios et al. 2021; Bever et al. 2021; Peters and Hallaran, 2021; Kleeman et al, 2023; Richards et al 2023; Peters and Hallaran 2023. Scoping report 31st January 2024 Public engagement event 22nd April: '-Housing costs including affordable rent also to be considered to achieve safe and cohesive communities' '-Lack of halting sites' LDA: Statement of Strategy: 2024-2028 – Land Development Agency

	(-/+) Apartments presents challenges relating to connection to nature, daylight and fresh air (--) Lack of shared recreational space, private gardens were found to have a negative impact on mental health (++) communal areas within apartment buildings are significant for social (encouraging 'neighbouring and reducing loneliness) outcomes										
Secure tenure protects health and poor quality and lack of affordable housing and poor quality housing disproportionately affects lower income and disadvantaged populations.	(--) Housing status was a predictor of pain for people with chronic pain, due to the stress burden of homelessness or living in a low-income neighbourhood. (--) across all age groups, private renters on average report worse health and greater incidence of chronic illnesses compared to individuals in the homeowners group	High			High			High			Russell et al. 2021; Richards et al. 2023; Humes et al. 2023

	(--) Those living in Local Authority accommodation are particularly exposed to housing quality problems (--) Housing insecurity and lack of housing affordability was a psychosocial stressor that affected both physical and mental health										
Good quality housing is related to good health outcomes and improving existing housing stock will achieve positive health gains, particularly for vulnerable groups (older, younger, and low income)	(--) Poor quality housing, whether local authority or private rented, is linked with worse health outcomes. Issues such as dampness, mould, indoor pollution and the presence of harmful substances such as lead or asbestos can all contribute towards illness, particularly respiratory infections, asthma and lead poisoning (++) housing refurbishment and modifications, provision of adequate heating, improvements to ventilation and water supply were associated with improved respiratory outcomes, quality of life	High			High			High			Ige et al. 2018.; Lancet editorial, 2024; Richards et al. 2023; Kleeman et al. 2023; Humes et al. 2023; Palacios et al 2020

	and mental health. Prioritization of housing for vulnerable groups led to improved wellbeing (--) Residents of poorly maintained dwellings report a lower subjective health status and visit the doctor more often Removal of solid fuel and PM10s has air quality improvements and inside air quality improvements. Servicing of appliances (--) unhealthy housing correlates with poor health outcomes (--)Toxic materials used in housing construction or cleaning, such as lead, asbestos, indoor allergens, ozone, and radon, were injurious to health, including cognitive disabilities, neurodevelopmental defects, asthma, cancer, asbestosis, and death (--) Indoor household air pollution from multiple sources (e.g. biomass and										

	solid fuels used for cooking and heating) negatively impacted health, including eye infections, respiratory-related diseases and deaths, cancers, and hypertension High proportion of income spent on heating means less likely to open windows and ventilate adequately.										

STEP 2

Hypothesis	Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented Re: Potential impact ie. Positive or negative (narrative) Narrative- write up)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)
		Positive/ opportunities			**Negative/ unintended consequences**		
		High	Short, medium, long term	Confirmed	High	Short, medium, long term	confirmed

Reasoned conclusion- Housing Determinant

Objective 2.10: "To support the delivery of a 15-Minute City that supports Compact Liveable Growth by creating vibrant local communities that can access all necessary amenities within a 10-minute walk/cycle and access workplaces and other neighbourhoods with a 15-minute public transport journey. Implementation will include walkable neighbourhoods, towns, and communities with mix of uses, **house types and tenure** that foster a diverse, resilient, socially inclusive and responsive city. This includes support for public and active travel infrastructure projects and services and enhanced neighbourhood permeability. Strategic infrastructure and large-scale developments shall demonstrate how they contribute to a 15-minute city and enhance Cork City's liveability and accessibility." Page 63 of the Cork City Development Plan (2022-2028)."

Determinant: Safe and cohesive communities		**Housing (type and tenure)**
	Aspect	Text
1	Source of change (Table 07 and 08, pg 122.)	The 15-minute city objective includes housing considerations. Adequate housing is a key component of safe and cohesive communities (determinant of health) including the health implications of changes to housing supply (including affordability), quality, location, tenure and design (determinants of health re. housing) affecting socio-economic and health (physical and psychological) outcomes (health issues).
2	Populations affected including vulnerabilities	Adequate housing, including secure tenure, is an essential health consideration for all populations. Affordability and supply of housing continue to challenge the obtainment of adequate housing for all in Ireland with poor quality housing disproportionately affecting lower income and disadvantaged populations along with those in private rental accommodation. **Those with vulnerabilities** due to age (older or younger populations), low income (including unemployed), poorer health status, gender and social disadvantage (ethnic minorities, LGBTQI+, homeless, women) and geographic factors (people living in areas classified as deprived) are particularly vulnerable to poor health outcome related to housing.
3	Main population *health outcomes* or measures (Table 09) (column 6, Table 10 – health outcomes/measures)	**Housing insecurity (tenure and affordability)** is associated with *homelessness, overcrowding, poor physical and mental health outcomes including reduced quality of life and can force people towards poorer quality houses*. **Poor quality** housing health effects are associated with *increased respiratory disease, infections, exposure to environmental and health hazards, poorer phycological health, reduced quality of life and worse developmental outcomes for children including educational outcomes*. **Poorly designed** homes are *associated with increased risk of accidents and injury*, particularly for children and older populations. The **location of housing** impacts a*ccessibility to essential amenities and services such as public transport, healthier food options, green spaces, and educational and healthcare services* which directly and indirectly impacts health outcomes.
4	Any known thresholds for effects	We spoke about proximity/location of housing/noise – please add to this if you are aware of any that are directly relevant.
5	Likelihood/causal pathways(section 1-3 of Figure T06, pg 116)	The potential effect is considered **likely** because there is **a plausible** relationship between source- pathway-receptor **Source**: inadequate housing including accessibility to housing. **Pathways**: Housing quality, design, affordability and location affects multiple health outcomes **Receptors**: All populations and vulnerable populations in particular. The potential effect is **probable** as no highly unusual conditions are required for source-pathway-receptor linkages.

		The scientific literature shows an association between inadequate housing and poorer health and quality of life outcomes. The assessment has had regard for the population groups who may be particularly sensitive. For example, lower income and disadvantaged populations, those in private rental accommodation, those living in social housing and in areas of existing deprivation.
6	Context in which professional judgment is reached	Baseline data indicates that relevant **vulnerabilities and inequalities** identified in the literature may be present (age, income, tenure, people living with disabilities, non-Irish nationals). The baseline data suggests that effects of improving accessibility to better quality housing could be amplified in vulnerable populations, including geographic areas classified as deprived (and typically with a higher proportion of the population living in local authority housing and poorer health outcomes). As identified in the baseline data and scoping report, housing is a key social determinant of health and increasing accessibility to adequate housing is a **national priority** (HSE Social Inclusion 2024, Department of Social Protection, 2023, Housing Commission 2024; Housing for All Plan 2030) including the retrofitting existing dwelling to an BER of B2 (Climate Action Plan, 2024).
6.1	Contextual factors relating to acceptability of change in determinant of health for the setting	The Housing for All Plan sets the following expectation for housing in Ireland • Supporting Homeownership and Increasing Affordability; • Eradicating Homelessness, Increasing Social Housing Delivery and Supporting Social Inclusion; • Increasing New Housing Supply; and • Addressing Vacancy and Efficient Use of Existing Stock. The Programme for Government, Our Shared Future, objective is that everybody should have access to sustainable, good quality housing to purchase or rent at an affordable price, built to a high standard, and located close to essential services, offering a high quality of life. The Climate Action Plan 2024, Annex of Actions, under the theme of a National Retrofitting Residential Plan includes a key performance indicator to deliver the Equivalent of 120,000 dwellings retrofitted to BERB2 cost optimal or carbon equivalent and 45,000 existing dwellings using heat pumps by 2025. Action number BE/24/6(TF) is specific to assisting those 'least able to afford retrofit' (pp. 45) 1. The National Planning Framework requires that the planning system should plan for a more diverse and socially inclusive society that targets equality of opportunity and better quality of life. The NPF requires 'that people with disabilities; the Travelling Community; older people, younger people and children should be specifically considered' Locally, at the Cork City level, key housing issues identified in Cork City's Local and Economic Development Plan (2024-2029) include: lack of affordable housing, high rate of derelict properties and vacancy, and high level of households with low energy efficiency and without access to renewable energy.

		Delivering housing is also a key component of the Cork City Development Plan (2022-2028). Objective 2.32 of the Core Strategy supports 'an increase in the supply, affordability, and quality of new housing in the city and provide a range of housing options delivering good design that is appropriate to the character of the area in which it is built, while also achieving an efficient use of zoned and services land' The Joint Cork City and Cork County Housing Strategy / Housing Need and Demand Assessment (HNDA) establishes the housing targets for net housing completions for the Development Plan period, informed by the NPF, NPF Roadmap, RSES and the Housing Supply Guidelines (DHLGC, December 2020).
7	Mitigation secured and/or enhancements secured (for strategic level this may be policy wording edits)	None
8	baseline change Sensitivity to proposal (Figure T09) Magnitude of change due to proposal And/or magnitude of health change (Figure T11)	Baseline data indicates that 81% of Cork cities population consider their health status to be good. However, 23.6% of the population are living with a disability and the number of areas classified as very or extremely deprived has increased. Taking into account the extent of the current housing crisis and its wide ranging socio-economic and health impacts across life stages and populations the **sensitivity of the general population** is considered medium . The **sensitivity of more vulnerable populations (younger and older age, ethnicity, migrants, homeless, people with disabilities, gender, LGBTQI+, income)** is considered high given that these populations face greater barriers to adequate housing compared to general population, in some instances (ethnic groups, migrants, lower income) are more likely to be living in more deprived areas, and are more likely to be living with/experience poorer health outcomes, thus more **sensitive** to the effects of inadequate housing. As illustrated in the scientific literature, older people and children are particularly vulnerable to the effects of cold, damp and mould. Increasing the supply and access to affordable, good quality, well designed and connected homes along with retrofitting existing housing stock, can reduce health inequalities, mortality, morbidity, and improve quality of life. Access to housing is **an issue of concern** as gauged through the public engagement event. The **magnitude of change due to proposal and magnitude of health change** is therefore **high**.
9	Professional judgment on significance including differences between the general populations and vulnerable group population and how	Ensuring access to adequate, well connected (services and amenities) housing can reduce health inequity and improve overall health and well-being. Achieving this would have short, medium and long term highly desirable impacts. For vulnerable populations, the baseline change is expected to be **substantial** if this was achieved. The assessment of the objective 2.10 of the Core Strategy in relation to housing acknowledges that there is **a causal** pathway established in the scientific literature, relevant health priorities are of **specific relevance,** and there would potentially be a **substantial** effect on delivery of local health policy expectations.

	these may change over time (Figure T12)	
10	Describe any monitoring and adaptive management of likely significant effects	Monitoring continues as part of the CCDP implementation phase; and as part of the HIA monitoring and evaluation plan, decided at the end of the process (I.E details on housing details within in the plan that address any of the above and any gaps/considerations for the next plan.

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7.2 Neighbourhood design

OLDER PEOPLE

STEP 1

Hypothesis	**Potential Impact i.e positive/opportunity** **Or/ and** **negative/unintended consequence**	**Health sensitivity to the population** (use IPH model page 144)			**Magnitude of the impact** (use IPH model page 145)			**Health significance (sensitivity + magnitude)** (use IPH model page 148)			**Evidence** i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Neighbourhood design impacts positively on health.	+ enhanced walkability; increased social engagement & mobility; increased physical activity; increased access to facilities and services; improve mental health ad protect against loneliness. -neighbourhood design that is not a connected, open, and permeable space can have a negative impact on older adult's health in terms of decrease in social engagement, physical activity, mobility,	high			high			high			Public engagement event 22nd April 2024- importance of the age friendliness of areas in the 15-minute city; areas of the city need to be serviced with access to shops and health care facilities, community facilities, so that older people have these in their area and not walking great lengths to get places; compact growth impact on older people should include appropriate housing to their needs, footpaths, road crossings and services; compact growth will lead to community building and cohesiveness; SG scoping workshop report 31st Jan 2024- need to consider ex suburban isolation; enhance neighbourhood design to increase mobility for older adults in and out of area and to and from bus stops. Cork Age Friendly Cities draft strategy; O'Brien et al Cork study; Cork healthy cities health profile (2018); PHS 2022

	walkability; can exacerbate loneliness and safety concerns.										Bird et al 2018; Arakawa Martins et al 2018; Levasseur et al 2015; Van Cauwenberg et al 2021; Cleland et al 2019; Gomez et al 2015; Gascon et al 2016; Bower et al 2023; Kalina 2021; Odzakovic et al 2021

STEP 2

Hypothesis	**Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented** **Re: Potential impact ie. Positive or negative (narrative)** **Narrative- write up)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact** **(Plausible, probable, confirmed)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**
		Positive/ opportunities			**Negative/ unintended consequences**		
Neighbourhood design impacts positively on health.	Neighbourhood design that is permeable enhances walkability and social engagement; improves mental health and access to facilities and health care services; increase accessibility to travel options through bus and walkable streets/ wheel friendly streets.	High	Short, medium and long term	Confirmed	High	Short, medium and long term	Confirmed

	On the other hand, neighbourhood design that is not a connected and open space can have a negative impact on older adult's health in terms of decrease in social engagement, physical activity, mobility, walkability; can exacerbate loneliness and safety concerns.						

Young People

STEP 1

Hypothesis	**Potential Impact i.e positive/opportunity** **Or/ and** **negative/unintended consequence**	**Health sensitivity to the population** (use IPH model page 144)			**Magnitude of the impact** (use IPH model page 145)			**Health significance (sensitivity + magnitude)** (use IPH model page 148)			**Evidence** i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Neighbourhood design impacts positively on health.	+ independent mobility; increased physical activity; social connectedness; physical activity and community engagement in streets that are open to play; neighbourhood safety through design; -neighbourhoods inc streets, footpaths, green spaces, all need to be child-friendly and child-scaled to benefit from neighbourhood design as outlined in objective 2.10 and broadly across the CCDP	high			high			high			Public engagement event 22nd April 2024- The provision of public transport isn't possible for everyone to have a 15-minute city e.g. older people/ children/ people with disabilities have to walk to get to closest bus stop Scoping workshop report 31st Jan 2024- Societal values and children- how does society value children; Freedom of the city- more green spaces, parks, playgrounds, child-friendly communities is the overall theme coming from the consultation. PHS 2022; Healthy Ireland; National Participation Framework Department of Children, Equality, Disability, Integration and Youth, 2021; WHO 2019

											O'Sullivan et al 2020; Curtin et al 2024; Buckley et al 2021; Cork city profile Cork healthy Cities 2018- Cork research Literature- Finlay et al 2020; Parsons; Bird et al 2018; Marzi et al 2018; Buc et al 2019; Zougheibe et al 2021; Umstaddt Meyer et al 2019; Pineo 2018

STEP 2

Hypothesis	**Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented** **Re: Potential impact ie. Positive or negative (narrative)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact** **(Plausible, probable, confirmed)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**
		Positive/ opportunities			**Negative/ unintended consequences**		
Neighbourhood design impacts positively on health.	Children and adolescents will enjoy independent mobility; increased physical activity; social connectedness; physical activity and community engagement in streets that are open to play; neighbourhood safety through design; if policy implemented to ensure all neighbourhoods are permeable, open and child-friendly and child-scaled. If not, then long-term health impacts would be negative on child development and health outcomes.	high	Short, medium and long term	Confirmed	high	Short, medium and long term	Confirmed

People living on low-income

STEP 1

Hypothesis	**Potential Impact i.e positive/opportunity** **Or/ and** **negative/unintended consequence**	**Health sensitivity to the population** (use IPH model page 144)			**Magnitude of the impact** (use IPH model page 145)			**Health significance (sensitivity + magnitude)** (use IPH model page 148)			**Evidence** i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Neighbourhood design impacts positively on health.	+ open and permeable areas increase safety and perceptions of safety; health outcomes including physical activity and social connectedness through space; neighbourhood design associated with increased employment options and access to workplace; increase in green spaces that are open and safe -areas that experience social and economic disadvantage require a multi-focal and intersectoral approach to tackling inequalities- improving neighbourhood design is one important component but needs to be implemented along with other settings approaches and programmes; environmental conditions experienced differently among low incomes groups	high				Medium		high			Public engagement event 22nd April 2024- save money on transport with a 15-min city with good walking and cycling options; importance of amenities in the neighbourhood SG Scoping workshop report- incomes determines housing options and which neighbourhoods people can live in. Bird et al 2018; Bower et al 2023; WHO 2019; PHS 2022; Geddes et al 2012; Finlay et al 2020; Parsons et al 2021; Marzi et al 2018; RTPI, 2016; Gibson et al 2011; McElroy and Walsh 2023; Finegan et al 2020; Jivraj et al 2020; Curtin et al 2023 Gaston 2024- NW city regeneration; O'Connell et al 2024,

STEP 2

Hypothesis	**Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented** **Re: Potential impact ie. Positive or negative (narrative)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact** **(Plausible, probable, confirmed)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**
		Positive/ opportunities			**Negative/ unintended consequences**		
Neighbourhood design impacts positively on health.	Designing neighbourhoods that are permeable spaces, include open public spaces, connectivity for different modes of travel, increase social engagement in a local area, increase physical activity. A negative impact is a sole focus on neighbourhood design whereby this is the only measure to address low-income groups whereas multi-focal intersectoral approaches are required across local authority, health and social care services, community groups, educational centres, transport authorities.	High	Short, medium, long term	Confirmed	high	Short, medium, and long term	Confirmed

Reasoned conclusion for neighbourhood design

"To support the delivery of a 15-Minute City that supports Compact Liveable Growth by creating vibrant local communities that can access all necessary amenities within a 10-minute walk/cycle and access workplaces and other neighbourhoods with a 15-minute public transport journey. Implementation will include walkable neighbourhoods, towns, and communities with mix of uses, house types and tenure that foster a diverse, resilient, socially inclusive and responsive city. This includes support for public and active travel infrastructure projects and services and enhanced neighbourhood permeability. Strategic infrastructure and large-scale developments shall demonstrate how they contribute to a 15-minute city and enhance Cork City's liveability and accessibility." Page 63 of the Cork City Development Plan (2022-2028)."

Determinant		Neighbourhood design
	Aspect	Text
1	Source of change (Table 07 and 08)	Neighbourhood design including permeability has an impact on health, in terms of the design of key infrastructure, built environment, permeable spaces in creating a health promoting supportive environments within which people feel safe and comfortable engaging in active travel and public transport options, walking around the neighbourhood where they live, spend leisure time, visit, or walk through. Having permeable spaces with more "eyes on the street" would improve neighbourhood safety and visibility of neighbourhoods. Neighbourhood design including permeability, walkable neighbourhoods, accessibility to amenities and to public transport options and active travel routes as promoted within the objective 2.10, includes the health implications of changes in physical activity including mobility for older people, mental health and well-being, levels of safety which impacts on physical activity and community social connectedness, affecting connected routes as envisioned within the 15-minute city objective, accessibility to amenities and services (including health care appointments), and road safety.
2	Populations affected including vulnerabilities (Table 09)	The general population of Cork City would be affected. The population groups identified as a focus of this assessment are young people, older people, and people with low income. The evidence is that children, adolescents, and older people are disproportionally affected by neighbourhood design.
3	Main population health outcomes or measures (column 6, Table 10)	For neighbourhood design- health effects include poor physical health (e.g. cardiovascular health, respiratory health), **mental health conditions** (e.g. stress, anxiety, depression), associated with **levels of physical activity**, and community social connectedness. In the case where the population groups who are the focus of this assessment are affected by the design of their neighbourhood including permeability and appropriate public spaces including people-scaled green space, then they could expect to experience great health gain through physical exercise, and increased social connectedness however if paths, roads, public space, permeability within neighbourhood design are not appropriate to all users then the health effect is reduced.
4	Any known thresholds for effects	No known thresholds for neighbourhood design.
5	Likelihood/causal pathways (section 1-3 of Figure T06)	The potential effect is considered **likely** because there is a **plausible** relationship between source-pathway-receptor: **Source:** changes in neighbourhood design including permeability in creating supportive health environments within which people live, travel, and socialise. **Pathways:** changes in neighbourhood design and increased permeability of neighbourhoods, increased physical activity and mobility, pedestrian amenity; reduced driver delay and traffic, and pedestrian amenity (includes factors such as safety, attractiveness, convenience,

		information, and accessibility- that create supportive walking environments). This all links with physical activity, neighbourhood design and reduced social isolation by engaging with neighbourhood design. **Receptors**: local residents in Cork city neighbourhoods, pedestrians, cyclists, car users, bus drives, emergency services, people from vulnerable groups across the city including older people, young people and people living on low-income. The scientific and grey literature, and the public engagement data, shows an association between the types of changes that will be caused by implementing the 15-minute city, including permeability of neighbourhoods included in neighbourhood design options for the three population groups under focus in this assessment. The assessment has had regard to the population groups identified for the assessment that may be particularly sensitive. Beyond the three identified and included population groups, the literature identifies women, migrant communities, people living with limited mobility and accessibility are vulnerable to changes implemented through the 15-minute city. The whole population benefits from a physically active lifestyle through the connected liveable city including living and moving throughout permeable neighbourhoods.
6	Context in which professional judgment is reached	The baseline (phase 1 of evidence document) indicates that relevant **vulnerabilities and inequalities** identified in the scientific and grey literature, and the public engagement data, may be present. Health priorities as set out by the DoH with Healthy Ireland Framework (2013-2025) identifies health challenges for Ireland nationally in relation to social support and neighbourhood. The Cork Healthy Cities Action Plan (2020-2030) (priority areas: Integrated Planning for Health; Healthy Housing and Regeneration) for Cork city are relevant for use of healthy neighbourhood design. **National priorities** include supporting neighbourhood design to increase permeability of space and increase connectivity within and beyond neighbourhoods with active travel to reduce rates of obesity and prevent poor health; ensuring access to healthcare and medical appointments; and ensuring neighbourhood design that promotes wellbeing and social connection.
6.1	Contextual factors relating to acceptability of change in determinant of health for the setting	Government policy sets out national priorities for the enhancement of public spaces to enable communities to meet and connect socially. Healthy Ireland 2013-2025 Creating healthy supportive environments is a national priority for public health policy in Ireland, according to the Healthy Ireland Framework (Theme 1: Governance and Policy; Theme 2: Partnerships and Cross-sectoral work; Theme 3: Empowering People and Communities). **Local Economic and Community Plan 2024-2029, Cork city (LECP)** Supporting and creating resilient neighbourhoods through a placemaking approach is included under an objective in the LECP 'A city of safe, accessible and resilient communities.' **Sustainable, inclusive and empowered Communities: A Five-year strategy to support the community and voluntary sector in Ireland, 2019-2024** The goal of the strategy is to "create vibrant, sustainable, inclusive, empowered and self-determining communities that support the social, cultural and economic well-being of all members" (p. 10).

7	Mitigation secured and/or enhancements secured (for strategic level this may be policy wording edits)	None.
8	Residual baseline change Sensitivity to proposal (Figure T09) Magnitude of change due to proposal And/or magnitude of health change (Figure T11)	The **sensitivity of the general population** is considered to be low. This reflects that routine statistics for Cork city show that the health status of most people is good/ reported as good, and their daily activities are not limited. This estimation reflects that the general population would have a high capacity to adapt to changes in neighbourhood conditions where they are living if road works or changes in physical infrastructures are required to enhance permeability of space or connected routes in implementing the 15-minute city. The **sensitivity of vulnerable groups is considered high**. It is estimated that, from a life course perspective with particular focus on older people and young people, a high proportion of residents, pedestrians, cyclists, road users with cars in Cork city are young people and older people (dependents) who are on safe living environments, namely the neighbourhoods where they are living or visiting. People living on low income and / or living with social and economic disadvantage face greater barriers to access compared to the population as a whole and are more **sensitive** to changes in neighbourhood design (for positive and for unintended health impacts). People living on low income may compound barriers to access through travel and transport options if the vision of the 15-minute city is not realised. Neighbourhood living environments is an identified issue of concern as established through the public engagement event. The **magnitude of change due to the policy objective and magnitude of health change** is therefore **high**.
9	Professional judgment on significance including an differences between the general populations and vulnerable group population and how these may change over time (Figure T12)	The roll out of the 15-minute city would have short-, medium- and long-term impact. The population health baseline change is expected to be high as a result of the implementation of the 15-minute city, in terms of high positive impact for health and high potential unintended health impact if appropriate measures are not considered for population groups with vulnerabilities including older people, young people and people living on low-income. The assessment acknowledges that there is a **causal** pathway established in the scientific and grey literature, and the public engagement data, relevant health priorities are of **specific relevance** and there would potentially be a **substantial** effect on the delivery of local health policy expectations, aligning with the actions as set out in the WHO designated Cork Healthy Cities Action Plan 2020-2030. There would be a differential effect between the population of Cork city as a whole and vulnerable groups; the implementation of the 15-minute city going forward has potential to widen health inequalities for older people, young people and people living on low-incomes if neighbourhood design including permeability of space, appropriate public spaces including people-scaled green space. The conclusion is that the residual significance of the effect would be negligible for the population as a whole in terms of unintended health impact but significant for positive impact; and significant for both positive and unintended health impact for identified vulnerable population groups. For vulnerable

		populations, the baseline change is expected to be **substantial** if neighbourhoods were designed in a permeable and connected way as envisioned for the 15-minute city.
10	Describe any monitoring and adaptive management of likely significant effects	Monitoring continues as part of the CCDP implementation phase; and as part of the HIA monitoring and evaluation plan, decided at the end of the process.

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7.3 Access to Public Spaces

OLDER PEOPLE

STEP 1

Hypothesis	Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence	Health sensitivity to the population (use IPH model page 144)			Magnitude of the impact (use IPH model page 145)			Health significance (sensitivity + magnitude) (use IPH model page 148)			Evidence i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Accessible community meeting places and public spaces for meeting have a positive impact on health outcomes and on strengthening social inclusion.	+ mobility and independence, leads to physical activity through walking; reduce social isolation through connectedness; reduce social isolation supporting mental health, being socially connected -safety concerns; concerns about footpaths, roads, urban environment and walkability	High			High			High			Public engagement event 22nd April: More shared spaces – streets that are safe for people with disabilities and children and older communities; should not need to buy something to spend time in place in public; older people need improved space e.g. appropriate footpaths for walking and road crossings. Safety of shared public spaces highlighted as issue regarding the use of scooters around older people; Scoping workshop report 31st Jan 2024 - elderly needs to be considered and age-proofing is required as a younger person walking up to top of Gurranabraher is a different walking experience from an elderly person with mobility issues for example O'Brien et al 2021; Paquet et al 2023; Laidlaw et al 2023; Carri et al 2020; Makita et al 2020; Akbar et al 2021; Jing et al. 2024; Cunningham et al 2019;

											Age friendly cites strategy for Cork 2024; Donoghue 2016 (Walking to Wellbeing: Physical Activity, Social Participation and Psychological Health in Irish Adults Aged 50 Years and Older; Dublin Ir. Longitud. Study Ageing TILDA: Dublin, Ireland) SAFE report (Annalisa Setti, Cork 2019)

STEP 2

Hypothesis	Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented Re: Potential impact ie. Positive or negative (narrative) Narrative- write up)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)	
		Positive/ opportunities			Negative/ unintended consequences			
Accessible community meeting places and public spaces for meeting have a positive impact on health outcomes and on strengthening social inclusion.	Older people benefit from social connectedness, meeting in public places that are safe AND also perceived as safe by older	high	Short, medium and long term particularly given the aging population	Confirmed	High	Short, medium and long term particularly given the aging population	Confirmed	

	adults; potential neg impacts would be an assumption that all footpaths and roads are walkable and permeable, when they may not be							

YOUNG PEOPLE

STEP 1

Hypothesis	Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence	Health sensitivity to the population (use IPH model page 144)			Magnitude of the impact (use IPH model page 145)			Health significance (sensitivity + magnitude) (use IPH model page 148)			Evidence i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Accessible community meeting places and public spaces for meeting have a positive impact on health outcomes and on strengthening social inclusion.	+ improved social connectedness, inclusion, physical activity; enhanced community spirit through meeting in public spaces. Healthier behaviour for life course; health holistic	High			High			High			Public engagement event 22nd April 2024: people want to spend time with families and children; children playing on streets is positive health impact; needs to be safe city for children; "Playground and spaces for teenagers – not the same space. (Need a) change in perspective from thinking teens

	development of children, sense of belonging to place -safety concerns of being in public; safety and mobility issues with footpaths, roads, when walking and cycling; playing outside- not all public areas suitable for outside play and child inclusion										gathering is anti-social."; "Children can play on streets" Freedom of the city, CCDP submission 2021: more open green spaces, parks and playgrounds; having more places to relax and hang out evident in young people (6th class); need places to sit, more toilets, places to sit and eat; bright colours to make Cork more beautiful place to be; hanging out places or community centres to have fun; dog and human cafes; places as recreational amenities indoors and outdoors; significant number want more places to play, hang out, gather in that are safe and fun; children with wheelchairs need accessible places; safe places that would have security personnel and lightening after dark; Let's Grow Together Strategy Buckley 2021-2025: Theme 2, 'the outdoors and community' is important to children; theme 3 'health and safety' Let's Grow Strategy- Child Focused Community Profile 2015-2019: "If communities are to thrive, cognisance of how children are doing, the challenges they face, their relationships and environments, and the effectiveness of childhood supports is essential. To better understand the experiences and needs of children in specific

											communities requires child focused area-level data." Akbar et al 2021; Pitt et al; Alejandre and Lynch 2020; Bikomeye et al 2021; Gevaert et al 2018; Minh et al 2017; McKinnon et al 2022; Gomes et al 2028

STEP 2

Hypothesis	Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)
		Positive/ opportunities			Negative/ unintended consequences		
Accessible community meeting places and public spaces for meeting have a positive impact on health outcomes and on strengthening social inclusion.	Children and adolescents need places to play, hang out and gather that are fun and safe. Such places will improve social inclusion which supports metal health in children. -safety concerns are the main potential neg	high	Short, medium and long term, especially as childhood sets the health bedrock for people	Confirmed	high	Short-medium, long term	Confirmed

	health impact, in terms of personal safety and also places that are child- and mobility-friendly.						

People living on low-income

STEP 1

Hypothesis	Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence	Health sensitivity to the population (use IPH model page 144)			Magnitude of the impact (use IPH model page 145)			Health significance (sensitivity + magnitude) (use IPH model page 148)			Evidence i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Accessible community meeting places and public spaces for meeting have a positive impact on health outcomes and on strengthening social inclusion.	+ social inclusion & social connectedness; food environment; increased physical activity -Safety concerns in public and in community meeting areas, for example, in community gardens	High				Medium		High			Public engagement event 22nd April, should not need to buy something to spend time in place in public Scoping workshop report 31st Jan 2024 Thomson et al 2022 Joseph et al 2023 Yannish et al 2029; Dory, 2023

STEP 2

Hypothesis	Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented Re: Potential impact ie. Positive or negative (narrative) Narrative- write up)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)
		Positive/ opportunities			Negative/ unintended consequences		
Accessible community meeting places and public spaces for meeting have a positive impact on health outcomes and on strengthening social inclusion.	For people living low incomes, having places to meet and be in public has a significant impact when it is not a pay for being place e.g. buy a coffee outside. Social inclusion can increase, physical activity as a result of being outside. Potential negative impacts include safety concerns outside in a public unrestricted place.	high	Short, medium, but what are the long term effects, unsure	Confirmed	High	Short is out because not implemented right now. Medium- long term	Confirmed

Reasoned conclusion for access to public spaces

"To support the delivery of a 15-Minute City that supports Compact Liveable Growth by creating vibrant local communities that can access all necessary amenities within a 10-minute walk/cycle and access workplaces and other neighbourhoods with a 15-minute public transport journey. Implementation will include walkable neighbourhoods, towns, and communities with mix of uses, house types and tenure that foster a diverse, resilient, socially inclusive and responsive city. This includes support for public and active travel infrastructure projects and services and enhanced neighbourhood permeability. Strategic infrastructure and large-scale developments shall demonstrate how they contribute to a 15-minute city and enhance Cork City's liveability and accessibility." Page 63 of the Cork City Development Plan (2022-2028)."

Determinant: Safe and Cohesive communities		Sub-determinant: Public spaces
1	Source of change (Table 07 and 08)	Accessible community meeting places and public spaces for meeting is promoted within the objective 2.10, namely "Creating vibrant local communities that can access all necessary amenities," includes the health implications of changes on health outcomes including an increase physical activity through an increase in engagement outside homes in public spaces which leads to a reduction in risk factors for chronic diseases including diabetes and coronary heart disease. Another important health impact is a strengthening of social connectedness across older people, children and adolescents and people living on a restricted income.
2	Populations affected including vulnerabilities (Table 09)	The general population of Cork City would be affected. Vulnerable population groups identified as a focus of this assessment are young people, older people, and people with low income. For young people and people living on low-income, having public spaces would positively impact social cohesion and connectedness. For older people, there are also positive impacts on physical mobility and increased levels of personal independence.
3	Main population health outcomes or measures (column 6, Table 10)	Accessible public meetings places for communities has a positive impact on health outcomes including increased physical activity leads to reduction in risk factors for chronic diseases across all population groups but with particular impact on vulnerable populations; strengthening social connectedness and mental well-being across all population groups but with particular impact on vulnerable populations; increase in mental, cognitive, physical, social and emotional development of young people and older people. Ensuring safe, accessible, and appropriate public spaces are available within at no cost is important particularly for people living on restricted or low incomes.
4	Any known thresholds for effects	Having public spaces assumes the accessibility of public spaces via public transport/active travel – dependent on safety concerns; concerns about footpaths, roads, urban environment and walkability.
5	Likelihood/causal pathways(section 1-3 of Figure T06)	The potential effect is considered likely because there is a plausible relationship between source-pathway-receptor. Source: Changes in the provision of public meeting spaces for people to come together through the policy objective for the 15-minute city, linking communities with one another, as well as other community residential, commercial and amenity services. Pathways: Changes in increased use of public space for communities to meet and gather, residential amenity, environmental aesthetics, increased safety within neighbourhoods when more footfall on paths. This all links with physical activity, increase in mental, cognitive,

		physical, social, and emotional development, increased social connectedness and mental well-being by engaging with public space. Evidence from the scientific literature supports the association between public spaces and positive health outcomes –having positive impacts on social connectedness and social cohesion. Receptors: general public, population groups identified in the literature that may be particularly sensitive – young people, older people, and low-income groups. The scientific and grey literature, and the public engagement data, shows an association between the types of changes that will be caused by implementing the 15-min city, including ensuring meeting spaces are created for vibrant communities to flourish, for the three population groups under focus in this assessment. The assessment has had regard to the population groups identified that may be particularly sensitive. Beyond the three identified and included population groups, the literature identifies women, migrant communities, people living with limited mobility and accessibility are vulnerable to changes implemented through the 15-minute city. The whole population benefits from a social and physically engaged active and connected lifestyle through the connected liveable city including using public spaces that are accessible, appropriate, and available.
6	Context in which professional judgment is reached	The baseline (phase 1 of evidence document) indicates that relevant vulnerabilities and inequalities identified in the scientific and grey literature, and the public engagement data, may be present. Health priorities as set out by the DoH with Healthy Ireland Framework (2013-2025) identifies health challenges for Ireland nationally, and the Cork Healthy Cities Action Plan (2020-2030) (priority area 'Healthy early years,' 'Healthy older people,' 'Mental health and wellbeing,' 'Healthy places and settings,' 'Community resilience') for Cork city are relevant for use of public spaces. These national priorities include supporting community connectedness and socialisation to prevent poor health; promotes social inclusion, wellbeing, and social connection through the connected city. The provision of public spaces for people to come together emerged as a key theme from the HIA public consultation event on the Cork City Development Plan. The scientific literature highlights the positive health impacts experienced by people feeling safe and comfortable to meet together in the public realm or 'third place' to socialise in a safe and open manner. The main positive health impact of having open, safe, and accessible public meeting places in cities is social connectedness, whereby when people feeling comfortable and safe to meet freely and easily in public, for instance in parks, green spaces, city centre pedestrianised areas, their sense of place and sense of being included within the city is enhanced.
6.1	Contextual factors relating to acceptability of change in determinant of	Government policy sets out national priorities for the enhancement of public spaces to enable communities to meet and connect socially. Healthy Ireland 2013-2025 Reducing social exclusion is a national priority for public health policy in Ireland, according to the Healthy Ireland Framework. **Local Economic and Community Plan 2024-2029, Cork city** (LECP)

	health for the setting	Accessible community meeting public spaces is included under an objective in the LECP 'A city of safe, accessible and resilient communities.' Constraints identified in the LECP for implementing active travel in the city including: Lack of public transport options compared to other European cities. Over reliance on the private car as the primary mode of transport impacts negatively the city's campaign to tackle climate change. (page 47). **Sustainable, inclusive and empowered Communities:** A Five-year strategy to support the community and voluntary sector in Ireland, 2019-2024 The goal of the strategy is to "create vibrant, sustainable, inclusive, empowered and self-determining communities that support the social, cultural and economic well-being of all members" (p. 10). Communities require public places to meet in order to achieve the eleven objectives of this strategy, which all centre on empowering communities to connect together, meet socially and build community resilience to address upcoming challenges including climate change, changes in infrastructure and urban renewal programmes.
7	Mitigation secured and/or enhancements secured (for strategic level this may be policy wording edits)	None secured.
8	Baseline change Sensitivity to proposal (Figure T09) Magnitude of change due to proposal And/or magnitude of health change (Figure T11)	The sensitivity of the general population is considered to be medium. This reflects that routine statistics for Cork city show that the health status of most people is good/ reported as good, and their daily activities are not limited. This estimation reflects that the general population would have a high capacity to adapt to changes in public space if road works are required to enhance public spaces in implementing the 15-minute city. The sensitivity of vulnerable groups is considered high. It is estimated that, from a life course perspective with a focus on older people (at risk of social isolation), young people (for enhanced mental, cognitive, social and physical development), and particularly for people on low-income who would be able to access these spaces for free, as well as for older people at risk of social isolation. People living on low income and / or living with social and economic disadvantage face greater barriers to accessing safe meeting places compared to the population as a whole and are more sensitive to changes in access to public meeting space changes (for positive and for unintended health impacts). People living on low income may compound barriers to access through travel and transport options when accessing public spaces beyond a local area (if that were desired/ preferred) if the vision of the 15-minute city is not realised. Access to public meeting spaces is an identified issue of concern as established through the public engagement event. The **magnitude of change due to the policy objective and magnitude of health change** is therefore **high**. Analysis of data from the public engagement event on the HIA of the Cork City Development Plan, which included 24 members of the public of Cork City, identified the need for public spaces as a key theme. This highlights the importance of open, accessible, and safe spaces for the general public.

9	Professional judgment on significance including and differences between the general populations and vulnerable group population and how these may change over time (Figure T12)	The roll out of the 15-minute city would have short-, medium- and long-term impact. The population health baseline change is expected to be high as a result of the implementation of the 15-minute city, in terms of high positive impact for health and high potential unintended health impact if appropriate measures are not considered for population groups with vulnerabilities including older people, young people and people living on low-income. The assessment acknowledges that there is a causal pathway established in the scientific and grey literature, and the public engagement data, relevant health priorities are of specific relevance and there would potentially be a substantial effect on the delivery of local health policy expectations, aligning with the actions as set out in the WHO designated Cork Healthy Cities Action Plan 2020-2030. There would be a differential effect between the population of Cork city as a whole and vulnerable groups; the implementation of the 15-minute city going forward has potential to widen health inequalities for older people, young people and people living on low-incomes if safe community meeting places, as part of the vision of the 15-minute city to create/ enhance vibrant local communities. The conclusion is that the residual significance of the effect would be negligible for the population as a whole in terms of unintended health impact but significant for positive impact; and significant for both positive and unintended health impact for identified vulnerable population groups. For vulnerable populations, the baseline change is expected to be **substantial** if access to local public spaces for communities to meet were to be achieved for vulnerable populations in particular.
10	Describe any monitoring and adaptive management of likely significant effects	Monitoring continues as part of the CCDP implementation phase; and as part of the HIA monitoring and evaluation plan, decided at the end of the process.

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7.4 Modes of Travel

OLDER PEOPLE
STEP 1

Hypothesis	**Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence**	**Health sensitivity to the population** (use IPH model page 144)			**Magnitude of the impact** (use IPH model page 145)			**Health significance (sensitivity + magnitude)** (use IPH model page 148)			**Evidence** i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Different modes of travel including accessing public transport and active travel modes, impact positively on health (refer to Scottish evidence on this). Bower et al loneliness Structures include the design, distribution, and density of housing; parklands and public spaces; transport networks; schools; health services; and other amenities for older people	+ mobility and independence, increase physical activity; improve mental health; protect against risk factors for chronic disease; through active travel and public transport that is affordable, accessible, available, and appropriate; access to facilities, medical appointments. -element of stress and anxiety with overcrowded public transport; neighbourhoods need to be walkable and designed to facilitate active travel (walking and cycling), kerbs, road design, footpaths etc; Implementing different modes of travel that are not localised and do not	High			High			High			Public engagement 22nd April- "Better public transport- make travel easier, safer and healthier"; "The provision of public transport isn't possible for everyone to have a 15-minute city e.g. older people/ children/ people with disabilities have to walk to get to closest bus stop"; "Buses don't always arrive" "Transportation, if city could solve transport issue, then other issues could slot into place. Car dependency in Cork, people don't feel that the bus route" Scoping workshop report: The group raised the issue of *not building more roads, having everything within walking and cycling distance.* Creating an enabling environment where people don't need to drive. The group cited the need for good transport that is reliable, frequent, safe, and affordable. Potential population groups under this determinant included those experiencing ex suburban isolation, elderly needs to be considered and age-proofing is required; Walk may be too far for certain groups for example elderly people with mobility issues from bus stops. Lees, 2023; Manisalidis et al 2020; Simoni et al 2015; Mueller et al 2017; PHS 2022; 2024; Sustainable Mobility Policy: National Sustainable Mobility Policy 2022. Government of Ireland. Working Towards an Age Friendly Strategy for Cork, 2024-2028 (2024, draft); Cork city health profile (2018); O'Brien et al 2021; Donoghue et al 2016

	meet the needs of older people will reduce or eliminate the potential positive impact of this vision in the 15-minute city.										

STEP 2

Hypothesis	**Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented** **Re: Potential impact ie. Positive or negative (narrative)** **Narrative- write up)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**
		Positive/ opportunities			**Negative/ unintended consequences**		
Different modes of travel including accessing public transport and active travel modes, impact positively on health	The positive health impact of different modes of travel is strong. The implementation of this action will determine its impact on the health of older people. Ensuring active travel and public transport, including bus stops, is accessible, affordable, available and appropriate is crucial to maximise the potential health impact and avoid potential	High	Short, medium and long term	Confirmed	High	Short, medium and long term	Confirmed

	negative/ unintended consequences on the health of older people.						

YOUNG PEOPLE
STEP 1

Hypothesis	**Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence**	**Health sensitivity to the population** (use IPH model page 144)			**Magnitude of the impact** (use IPH model page 145)			**Health significance (sensitivity + magnitude)** (use IPH model page 148)			**Evidence** i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Different modes of travel including accessing public transport and active travel modes, impact positively on health.	+ increased activity as part of commute to school, hobbies, to meet friends, with active travel and public transport; increased physical activity associated with walking and cycling, healthier lifestyle and development in children with increase physical activity; improved mental health and social connection to place. -a lack of different modes of active trave options and public transport that is not available, accessible, affordable and appropriate would likely have a negative/ unintended impact on young people and would	High			High			High			Public engagement 22nd April 2024- "Children, shorter commutes lead to more time with family and children;" "Better public transport- make travel easier, safer and healthier"; "Transportation, if city could solve transport issue then other issues could slot into place. Car dependency in Cork, people don't feel that the bus route" Scoping workshop report: There were a number of overlapping impacts identified for example, health and social care services and childcare or transport options under transport and environmental conditions and health-related behaviours. Freedom of the city 2021- Finding alternative travel solutions was a dominant theme: Having fewer cars and less private transport was a common response to this question about addressing climate change: children said we should have 'less cars' and 'less gas to stop polluting. The children and young people documented issues relating to active Travel, public transport, roads, port of cork and cork airport. The most common issue highlighted across the artefacts for all ages was the need to increase capacity for cycling, with the associated need to increase bicycle lanes and safe places to cycle for everyone across the city. Curtin et al 2023; Buckley et al 2021; Jones et al. 2019; Mitra 2013; Morris et al 2022; Jacob et al 2021; Lowans et al 2023; PHS 2022, 2024; Smyth et al 2023;

	not result in maximising the potential positive health impact of active travel and public transport options.										

STEP 2

Hypothesis	**Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented** **Re: Potential impact ie. Positive or negative (narrative)** **Narrative- write up)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**
		Positive/ opportunities			**Negative/ unintended consequences**		
Different modes of travel including accessing public transport and active travel modes, impact positively on health.	Different modes of travel including active travel and public transport would have a positive impact on children, increasing physical activity, increasing social connectedness and engagement in local area through walking, cycling and walking to and from bus stop, with public transport options being affordable, accessible, available, and appropriate. Potential negative/ unintended impacts on health of young people would result from not implementing different modes of travel that are affordable, accessible,	high	Short, medium, long term	Confirmed	high	Short, medium, long term	Confirmed

	available, and appropriate; safe						

People living on low-income
STEP 1

Hypothesis	**Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence**	**Health sensitivity to the population** (use IPH model page 144)			**Magnitude of the impact** (use IPH model page 145)			**Health significance (sensitivity + magnitude)** (use IPH model page 148)			**Evidence** i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Different modes of travel including accessing public transport and active travel modes, impact positively on health (refer to Scottish evidence on this).	+ transport options that are accessible will boost uptake; active travel impacts on increases physical activity which protects against chronic diseases, improves mental health, improve social cohesiveness -if modes of travel are not accessible and localised to people living on low income or active travel not accessible, promoted and localised to people living on low income, will disconnect communities leading to lack of access to workplaces, other areas in the city, within the neighbourhood	High			High			High			Public engagement 22nd April- "Better public transport- makes travel easier, safer and healthier"; "bus corridors are essential- engagement with communities is needed – poor so far"; "connections needed between compact areas so these areas don't become 'cut off' disconnected as has happened before"; "Park & ride needs to be promoted more"; "Transportation, if city could solve transport issue, then other issues could slot into place. Car dependency in Cork- people don't feel that the bus route"; "Health & joy from active transport/ travel" Scoping workshop report- Theme: *Meaningful employment and housing*, whereby people can give back to society and are living in stable housing, can have positive impacts (income, stability, giving back to society, social inclusion) and potentially negative impacts (lack of agency, lack of money, lack of time from having to travel far to work, costs, poverty); Need for good transport that is reliable, frequent, safe, and affordable. Sustainable Mobility Policy: National Sustainable Mobility Policy 2022. Government of Ireland.

											Lowans et al 2023; Lucas et al 2019; PHS 2022; 2024; Stankov et al. 2020; Pridmore et al 2017; Marmot et al. 2020; Geddes et al 2012; Rae et al 2016;

STEP 2

Hypothesis	**Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented** **Re: Potential impact ie. Positive or negative (narrative)** **Narrative- write up)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**
		Positive/ opportunities			**Negative/ unintended consequences**		
Different modes of travel including accessing public transport and active travel modes, impact positively on health.	Ensuring different modes of travel are accessible, affordable, available, and appropriate will result in a positive health impact on people living with low income. Implementing different modes of travel that are not localised and do not meet the needs of people living on low income will reduce or eliminate the potential positive impact of this vision in the 15-minute city.	High	Short, medium, long term	Confirmed	High	Short-medium, long term	Confirmed

Reasoned conclusion for modes of travel

"To support the delivery of a 15-Minute City that supports Compact Liveable Growth by creating vibrant local communities that can access all necessary amenities within a 10-minute walk/cycle and access workplaces and other neighbourhoods with a 15-minute public transport journey. Implementation will include walkable neighbourhoods, towns, and communities with mix of uses, house types and tenure that foster a diverse, resilient, socially inclusive and responsive city. This includes support for public and active travel infrastructure projects and services and enhanced neighbourhood permeability. Strategic infrastructure and large-scale developments shall demonstrate how they contribute to a 15-minute city and enhance Cork City's liveability and accessibility." Page 63 of the Cork City Development Plan (2022-2028)."

Determinant: Safe and Cohesive Communities		Sub-determinant- Modes of travel
	Aspect	Text
1	Source of change (Table 07 and 08)	Active travel and use of public transport which would lead to reduced reliance on car use is promoted within the objective 2.10, includes the health implications of changes in road traffic and potentially road works when implementing changes to roads/ including more cycle lanes, affecting: active/ sustainable travel, accessibility, travel times, road safety.
2	Populations affected including vulnerabilities (Table 09)	The general population would be affected, as well as vulnerable groups identified as the focus of this assessment including older people, young people, and people on low incomes. The population groups relevant to this assessment, due to proximity, living in Cork city; young- and older- age vulnerability as potentially more vulnerable travel/ transport users; low-income vulnerability (including people living with socio-economic disadvantage, including those on low-incomes for whom travel costs or alternatives may be limiting). Not included as population groups but with potential vulnerability include people living with mobility/ accessibility issues; poor health and poor mental health vulnerability; access and geographical vulnerability (people who experience existing access barriers or for whom access barriers to active travel and public transport options is limited).
3	Main population health outcomes or measures (column 6, Table 10)	For active travel- health effects may be associated with poor physical health (e.g. cardiovascular health, respiratory health), mental health conditions (e.g. stress, anxiety, depression), associated with levels of physical activity and obesity. In the case where the population groups who are the focus of this assessment have access to active travel routes, then they could expect to experience great health gain through physical exercises, reduced social isolation however if paths, roads and walkways are not appropriate to all users then the health effect is reduced. For public transport- health effects are associated with similar as above for physical and mental health, as walking to bus and from bus stops, and social connectivity on buses can increase potential health gain, if paths and walkways are connected appropriate to users (population groups) needs.
4	Any known thresholds for effects	Transport air quality and noise effects and their relevant thresholds are assessed separately for example within the statutory SEA conducted on the CCDP.
5	Likelihood/causal pathways (section 1-3 of Figure T06)	The potential effect is considered likely because there is a plausible relationship between source-pathway-receptor: Source: changes in active travel routes and increased number of bus routes (through Bus Connects) that link community residential, commercial and amenity services.

		Pathways: changes in reduced car use; reduced driver delay and traffic, pedestrian amenity, reduced accidents. This all links with physical activity, active travel, public transport use and reduced social isolation by engaging with public transport space. Receptors: local road and footpath users, cyclists, pedestrians, public transport users, bus drivers, emergency services, people from vulnerable groups across the city including older people, young people and people living on low-income. The scientific and grey literature, and the public engagement data, shows an association between the types of changes that will be caused by implementing the 15-min city, including road and pedestrian safety, travel times, accessibility, public transport options for the three population groups under focus in this assessment. The assessment has had regard to the population groups identified for the assessment that may be particularly sensitive. Beyond the three identified and included population groups, the literature identifies women, migrant communities, people living with limited mobility and accessibility are vulnerable to changes implemented through the 15-minute city. The whole population benefits from a physically active lifestyle through the connected liveable city including using public transport that is accessible, appropriate, affordable, and available, and active travel routes.
6	Context in which professional judgment is reached	The baseline (phase 1 of evidence document) indicates that relevant vulnerabilities and inequalities identified in the scientific and grey literature, and the public engagement data, may be present. Health priorities as set out by the DoH with Healthy Ireland Framework (2013-2025) identifies health challenges for Ireland nationally, and the Cork Healthy Cities Action Plan (2020-2030) (priority area 'Healthy Transport') for Cork city are relevant for use of public transport and active travel. These national priorities include supporting active travel to reduce rates of obesity and prevent poor health; ensuring access to healthcare and medical appointments; and ensuring travel and transport infrastructure that promotes social inclusion, wellbeing and social connection.
6.1	Contextual factors relating to acceptability of change in determinant of health for the setting	Government policy the National Sustainable Mobility Policy (setting strategic actions up to 2030 for active travel) sets out the following expectations for travel and transport in the local area: Developing pedestrian enhancement plans and cycle network plans to guide investment in new active travel infrastructure and retrofitting of existing infrastructure. Rebalancing transport movement in metropolitan areas and other urban centres away from the private car and towards active travel and public transport. Policy forms part of Ireland's climate action agenda with a number of complementary actions in the Climate Action Plan 2021, including actions focused on decarbonising the public transport fleet and enhancements across active travel and public transport (Figure 1, page 9, NSMP) What is sustainable mobility? Safe, accessible, comfortable, and affordable journeys to and from home, work, education, shops and leisure. Travel by cleaner and greener public transport. A shift away from the private car to greater use of active travel and public transport. National Development Plan (NDP) 2021-2030 The NDP allocates €35 billion for transport over the ten years which will enable the development of a range of active travel and bus and rail infrastructure over the coming years to facilitate the transition to sustainable mobility and meet our climate goals.

		Healthy Ireland 2013-2025 Encourage active travel to improve health status across population groups. **Local Economic and Community Plan 2024-2029, Cork city** Active travel an objective under 'A city valuing health & wellbeing.' Constraints identified in the LECP for implementing active travel in the city including: Lack of public transport options compared to other European cities. Over reliance on the private car as the primary mode of transport impacts negatively the city's campaign to tackle climate change. (page 47). National Investment Framework for Transport in Ireland (NIFTI) aligned with Project Ireland 2040 Strategic Objectives: Decarbonisation; Protection and Renewal; Mobility of People and Goods in Urban Areas; and Enhanced Regional and Rural Connectivity.
7	Mitigation secured and/or enhancements secured (for strategic level this may be policy wording edits)	None
8	Baseline change Sensitivity to proposal (Figure T09) Magnitude of change due to proposal And/or magnitude of health change (Figure T11)	The sensitivity of the general population is considered to be low. This reflects that routine statistics for Cork city show that the health status of most people is good/ reported as good, and their daily activities are not limited. This estimation reflects that the general population would have a high capacity to adapt to changes in traffic/ public transport/ active travel conditions if road works are required to enhance active travel and public transport routes in implementing the 15-minute city. The sensitivity of vulnerable groups is considered high. It is estimated that, from a life course perspective with particular focus on older people and young people, a high proportion of pedestrians, cyclists, public transport users, and road users with cars in Cork city are young people and older people (dependents) who are reliant on safe and accessible transport and travel options. People living on low income and / or living with social and economic disadvantage face greater barriers to access compared to the population as a whole and are more sensitive to changes in access to travel and transport changes (for positive and for unintended health impacts). People living on low income may compound barriers to access through travel and transport options if the vision of the 15-minute city is not realised. Access to public transport and active travel routes is an identified issue of concern as established through the public engagement event. The **magnitude of change due to the policy objective and magnitude of health change** is therefore **high**.
9	Professional judgment on	The roll out of the 15-minute city would have short-, medium- and long-term impact.

	significance including any differences between the general populations and vulnerable group population and how these may change over time (Figure T12)	The population health baseline change is expected to be high as a result of the implementation of the 15-minute city, in terms of high positive impact for health and high potential unintended health impact if appropriate measures are not considered for population groups with vulnerabilities including older people, young people and people living on low-income. The assessment acknowledges that there is a causal pathway established in the scientific and grey literature, and the public engagement data, relevant health priorities are of specific relevance and there would potentially be a substantial effect on the delivery of local health policy expectations, aligning with the actions as set out in the WHO designated Cork Healthy Cities Action Plan 2020-2030. There would be a differential effect between the population of Cork city as a whole and vulnerable groups; the implementation of the 15-minute city going forward has potential to widen health inequalities for older people, young people and people living on low-incomes if transport options are not appropriate, accessible, available and affordable, and if active travel is not continued being rolled out in a safe and appropriate way. The conclusion is that the residual significance of the effect would be negligible for the population as a whole in terms of unintended health impact but significant for positive impact; and significant for both positive and unintended health impact for identified vulnerable population groups. For vulnerable populations, the baseline change is expected to be **substantial** if access to active travel and public transport options were to be achieved for vulnerable populations in particular.
10	Describe any monitoring and adaptive management of likely significant effects	Monitoring continues as part of the CCDP implementation phase; and as part of the HIA monitoring and evaluation plan, decided at the end of the process.

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7.5 Walkability

OLDER PEOPLE
STEP 1

Hypothesis	**Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence**	**Health sensitivity to the population** (use IPH model page 144)			**Magnitude of the impact** (use IPH model page 145)			**Health significance (sensitivity + magnitude)** (use IPH model page 148)			**Evidence** i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Walking in supportive environments as part of daily living impacts positively on health (utility activity).	+ mixed-use neighbourhood designs that enable residents to shop and socialize within walking distance to their homes indirect effects on happiness in older populations (Leyden et al 2023) + provides mobility for those that do not have a car (Baobeid et al 2022) and cannot afford a car (Public engagement event 2024) +Increased walking activity linked to reduced chronic disease in healthier older population (Baobeid et al, 2021)	High			High			High			Public engagement event 22nd April: Scoping workshop report 31st Jan 2024 Westenhöfer, J., Nouri, E., Reschke, M.L. et al. (2023). Walkability and urban built environments—a systematic review of health impact assessments (HIA). BMC Public Health 23, 518 . https://doi.org/10.1186/s12889-023-15394-4 India-Aldana et al. (2023).Long-Term Exposure to Walkable Residential Neighborhoods and Risk of Obesity-Related Cancer in the New York University Women's Health Study (NYUWHS), *Environmental Health Perspectives*, 131(10), e100701-9 Leyden et al. (2023) Walkable Neighborhoods: Linkages Between Place, Health, and Happiness in Younger and Older Adults, *Journal of the American Planning Association*, 90: 101-114 Wang et al 2022: Higher walkability associated with increased physical activity and reduced

	+ Facilitates security and confidence when using public spaces in daily activities. Encourages and strengthens autonomy (Ulloa-Leon et al 2023) + reductions of non-communicable diseases like cardiovascular diseases, diabetes, cancer, and mortality (Westenhöfer et al 2023. + For older adults, walkable places mattered for happiness indirectly (ie. enhanced the likelihood that residents felt more healthy and more trusting of others, and this in turn affected the happiness of older people living in walkable neighbourhoods) (Leyden et al 2023).										obesity among United States adults, Obesity, 31, 2: 553-564

STEP 2

Hypothesis	**Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented** **Re: Potential impact ie. Positive or negative (narrative) Narrative- write up)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**	
Walking in supportive environments as part of daily living impacts positively on health (utility activity).		**Positive/ opportunities**			**Negative/ unintended consequences**			
			Short, medium and long term particularly given the aging population	Confirmed	High	Short, medium and long term particularly given the aging population	Confirmed	

All ages including Young people
STEP 1

Hypothesis	**Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence**	**Health sensitivity to the population** (use IPH model page 144)			**Magnitude of the impact** (use IPH model page 145)			**Health significance (sensitivity + magnitude)** (use IPH model page 148)			**Evidence** i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
.	+ Walkable neighbourhoods positively impact physical and mental health and wellbeing (Baobeid et al, 2021) Increased walking activity linked to reduced chronic disease in adolescents (Baobeid et al, 2021) -Negative impacts reported (only 2 HIAs) increased exposure to air pollution that may result from more walking and cycling. ie. increased exposure to air pollution and increased rate of asthma in children (Westenhöfer et al. 2023) -children living in neighbourhoods with low walkability were at increased risk of incident	High			High			High			Public engagement event 22nd April 2024:

	and ongoing asthma (Simons et al. 2018) +Walkable neighbourhoods provides mobility to children and parents that do not have cars (Baobeid et al 2022)										

STEP 2

Hypothesis	**Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented** **Re: Potential impact ie. Positive or negative (narrative) Narrative- write up)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**	
		Positive/ opportunities			**Negative/ unintended consequences**			
	High		Short, medium and long term	Confirmed	High	Short, medium and long term	Confirmed	

People living on low income
Assumption: Low income populations experience higher levels of ill- health (obesity, diabetes, cardiovascular diseases is more prevalent in low income)
STEP 1

Hypothesis	**Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence**	**Health sensitivity to the population** (use IPH model page 144)			**Magnitude of the impact** (use IPH model page 145)			**Health significance (sensitivity + magnitude)** (use IPH model page 148)			**Evidence** i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Walkable neighbourhoods have multiple health benefits.	+ Protective factor, reduced risk of obesity related cancers in women, especially for lower income women + (India-Aldana et al 2023). +Environmental, health, social and economic benefits (Baobeid et al. 2012) + majority of studies reported beneficial health impacts particularly reductions of non-communicable diseases like cardiovascular diseases, diabetes, cancer, and mortality (Westenhöfer et al 2023. - potential exposure to increased air pollution (Westenhöfer et al 2023)	High			High			High			Public engagement event 22nd April 2024: Women. prospective cohort of 14,274 women between 34 and 65 years of age India-Aldana et al. (2023).Long-Term Exposure to Walkable Residential Neighborhoods and Risk of Obesity-Related Cancer in the New York University Women's Health Study (NYUWHS), *Environmental Health Perspectives*, 131(10), e100701-9 Westenhöfer, J., Nouri, E., Reschke, M.L. et al. (2023) Walkability and urban built environments—a systematic review of health impact assessments (HIA). *BMC Public Health* 23, 518 . https://doi.org/10.1186/s12889-023-15394-4 Baobeid et al 2021: Walkability and Its Relationships With Health, Sustainability, and Livability: Elements of Physical Environment and Evaluation Frameworks, *Frontiers in Built Environment*, 7:72121

	+ people in highly walkable neighbourhoods were more likely to engage in adequate physical activity, walk near their home, and have a lower body mass index (BMI) compared to people in low-walkability neighbourhoods (Wang et al 2022) +Mental health benefits Leyden et al, 2023)										

STEP 2

Hypothesis	**Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented** **Re: Potential impact ie. Positive or negative (narrative) Narrative- write up)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**	**Significance (sensitivity + magnitude) low; medium; high**	**Duration (short; medium; long term)**	**Likelihood of impact (Plausible, probable, confirmed)**	
Walking in supportive environments as part of daily living impacts positively on health (utility activity).		**Positive/ opportunities**			**Negative/ unintended consequences**			
			Short, medium and long term particularly given the aging population	Confirmed	High	Short, medium and long term particularly given the aging population	Confirmed	

Reasoned conclusion for walkability

"To support the delivery of a 15-Minute City that supports Compact Liveable Growth by creating vibrant local communities that can access all necessary amenities within a 10-minute walk/cycle and access workplaces and other neighbourhoods with a 15-minute public transport journey. Implementation will include **walkable neighbourhoods**, towns, and communities with mix of uses, house types and tenure that foster a diverse, resilient, socially inclusive and responsive city. This includes support for public and active travel infrastructure projects and services and enhanced neighbourhood permeability. Strategic infrastructure and large-scale developments shall demonstrate how they contribute to a 15-minute city and enhance Cork City's liveability and accessibility." Page 63 of the Cork City Development Plan (2022-2028)."

Determinant: Safe and cohesive communities		**Sub-determinant: Walkability**
	Aspect	Text
1	Source of change (Table 07 and 08)	The 15-minute city objective which would lead to walkable safe neighbourhoods, towns, and communities ensuring more appropriate active travel options, walkable footpaths and walkways for pedestrians, reduced reliance on car use and reduced parking spaces including Park & Ride except when needed by people living with disabilities is promoted within the objective 2.10, includes the health implications of changes in road traffic and potentially road works when implementing changes to neighbourhoods roads and footpaths, affecting: walkability of the city for people living within Cork city, safety and visibility within neighbourhoods with street lighting, enabling people to walk through streets with due regard for appropriate accessibility within the walkable neighbourhood. The implementation of the 15-minute city should ensure no-one requires their car for any journey or reason.
2	Populations affected including vulnerabilities (Table 09)	The general population would be affected, as well as vulnerable groups identified as the focus of this assessment including older people, young people and people on low incomes. The population groups relevant to this assessment, due to proximity living in Cork city; **young- and older- age vulnerability** as potentially more vulnerable within walkable neighbourhoods/ neighbourhoods progressing to be more walkable; **low-income vulnerability** (including people living with socio-economic disadvantage, including those on low-incomes for whom travel costs or alternatives may be limiting). Not included as population groups but with potential vulnerability include people living with mobility/ accessibility issues; poor health and poor mental health vulnerability; access and geographical vulnerability (people who experience existing access barriers or for whom access barriers to walkability is limited).
3	**Main population health outcomes** or measures (column 6, Table 10)	There is evidence to suggest a relationship between walkable neighbourhoods within the built urban environment can have beneficial health impacts particularly in relation to **reductions of non-communicable diseases like cardiovascular diseases, diabetes, cancer, and mortality**. In the case where the population groups who are the focus of this assessment have access to safe walkable neighbourhoods, then they could expect to experience greater health gain through physical exercise and subsequent reductions in risk factors

		for non-communicable diseases and reduced social isolation. However, if paths, roads, walkways, and safety issues including good street lighting are not appropriate to all users then the health effect is reduced or not experienced at all by people.
4	Any known thresholds for effects	Darren happy to send us threshold indicators for walkability he created for submission to the National Planning Framework. They would be more relevant than what we have written here (deleted above).
5	Likelihood/causal pathways (section 1-3 of Figure T06)	The potential effect is considered **likely** because there is a **plausible** relationship between source-pathway-receptor: **Source:** changes in walkability of neighbourhoods across the city that link community residential, commercial and amenity services. **Pathways:** changes in reduced car use; reduced driver delay and traffic, increased pedestrian amenity, reduced accidents, increased safety of public and connected neighbourhoods. This all links with physical activity, active travel, and reduced social isolation by engaging in walking behaviours. **Receptors:** local road and footpath users, pedestrians, people from vulnerable groups across the city including older people, young people and people living on low-income. Furthermore, the potential effect **is probable/ significant**. The scientific and grey literature, and the public engagement data, shows an association between the types of changes that will be caused by implementing the 15-min city, including road and pedestrian safety, walkability of neighbourhoods for the three population groups under focus in this assessment. People in highly walkable neighbourhoods were more likely to engage in adequate physical activity, walk near their home, and have a lower body mass index (BMI) compared to people in low-walkability neighbourhoods. The assessment has had regard to the population groups identified for the assessment that may be particularly sensitive. Beyond the three identified and included population groups, the literature identifies women, migrant communities, ethnic minority communities, people living with limited mobility and accessibility are vulnerable to changes implemented through the 15-minute city. The whole population benefits from a physically active lifestyle through the connected liveable city that is walkable. Vulnerable groups could potentially be impacted to a greater extent than the population as a whole by the barriers to the building of more walkable neighbourhoods as they exist today (not including neighbourhoods to be developed in the future) include existing car-dependent infrastructure, zoning restrictions, existing car-dependent infrastructure, perceptions by some private developers that public demand is insufficient, and a hesitancy among investors to invest in walkable neighbourhoods.
6	Context in which professional judgment is reached	The baseline (phase 1 of evidence document) indicates that relevant sensitivities ad inequalities identified in the scientific and grey literature, and the public engagement data, may be present. Health priorities as set out by the DoH with Healthy Ireland Framework (2013-2025) identifies health challenges for Ireland nationally, and the Cork Healthy Cities Action Plan (2020-2030) (priority areas 'Increased Physical Activity' and 'Healthy Transport,') for Cork city are relevant for walkability of neighbourhoods in Cork. These priorities include supporting active travel including walking to reduce rates of obesity and prevent poor health; and ensuring travel and transport infrastructure that promotes social inclusion, wellbeing and social connection.

6.1	Contextual factors relating to acceptability of change in determinant of health for the setting	Government policy the National Sustainable Mobility Policy (setting strategic actions up to 2030 for active travel) sets out the following expectations for travel and transport in the local area: Developing pedestrian enhancement plans to guide investment in new active travel infrastructure and retrofitting of existing infrastructure. Rebalancing transport movement in metropolitan areas and other urban centres away from the private car and towards active travel. Policy forms part of Ireland's climate action agenda with a number of complementary actions in the Climate Action Plan 2021, including actions focused on decarbonising the public transport fleet and enhancements across active travel and public transport (Figure 1, page 9, NSMP, benefits of sustainable mobility) Healthy Ireland 2013-2025 Encourage active travel to improve health status across population groups in relation to enhance physical activity, which can result from walkable neighbourhoods. Local Economic and Community Plan 2024-2029, Cork city Active travel including walking within walkable neighbourhoods an objective under 'A city valuing health & wellbeing.' Constraints identified in the LECP for implementing active travel in the city including: Lack of public transport options compared to other European cities. Over reliance on the private car as the primary mode of transport impacts negatively the city's campaign to tackle climate change. (page 47).
7	Mitigation secured and/or enhancements secured (for strategic level this may be policy wording edits)	None secured.
8	Baseline change Sensitivity to proposal (Figure T09) Magnitude of change due to proposal	**The sensitivity of the general population** is considered to be low. This reflects that routine statistics for Cork city show that the health status of most people is good/ reported as good, and their daily activities are not limited in relation to walking within walkable neighbourhoods. This estimation reflects that the general population would have a high capacity to adapt to changes in neighbourhoods towards becoming walkable/ more walkable if road works are required to enhance active travel routes in implementing the 15-minute city.

	And/or magnitude of health change (Figure T11)	**The sensitivity of vulnerable groups** is considered high. It is estimated that, from a life course perspective with particular focus on older people and young people, a high proportion of pedestrians, in Cork city are young people and older people (dependents) who are reliant on safe and accessible active travel options, including walking within walkable neighbourhoods that have safe and appropriate infrastructure for the needs of such groups. People living on low income and / or living with social and economic disadvantage face greater barriers to access compared to the population as a whole and are more sensitive to changes in access to travel including walking within walkable neighbourhoods (for positive and for unintended health impacts). People living on low income may compound barriers to access through walkable neighbourhoods if the vision of the 15-minute city is not realised. **MISSING: MAGNITUDE OF CHANGE DUE TO PROPOSAL AND MAGNITUDE OF HEALTH CHANGE**
9	Professional judgment on significance including and differences between the general populations and vulnerable group population and how these may change over time (Figure T12)	The roll out of the 15-minute city would have short-, medium- and long-term impact. The population health baseline change is expected to be **high** as a result of the implementation of the 15-minute city, in terms of high positive impact for health and high potential unintended health impact if appropriate measures are not considered for population groups with vulnerabilities including older people, young people and people living on low-income for walkable neighbourhoods/ creating or developing neighbourhoods that are walkable in a safe and appropriate manner. The assessment acknowledges that there is a **causal pathway** established in the scientific and grey literature, and the public engagement data, **relevant health priorities are of specific relevance** and there would potentially be an influential effect on the delivery of local health policy expectations, aligning with the actions as set out in the LECP 2024-2029 and the Healthy Ireland Framework There would be a differential effect between the population of Cork city as a whole and vulnerable groups; the implementation of the 15-minute city going forward has potential to widen health inequalities for older people, young people and people living on low-incomes if neighbourhoods are not walkable in an appropriate, safe, accessible way. The conclusion is that the residual significance of the effect would be negligible for the population as a whole in terms of unintended health impact but significant for positive impact; and significant for both positive and unintended health impact for identified vulnerable population groups.
10	Describe any monitoring and adaptive management of likely significant effects	Monitoring continues as part of the CCDP implementation phase; and as part of the HIA monitoring and evaluation plan, decided at the end of the process.

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7.6 Accessible Workplaces

Older People

STEP 1

Hypothesis	Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence	Health sensitivity to the population (use IPH model page 144)			Magnitude of the impact (use IPH model page 145)		Health significance (sensitivity + magnitude) (use IPH model page 148)			Evidence i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Accessible workplaces with short travel times by public transport improves health by walking to and from bus stops, increases social interaction, and decreases car reliance.	(++) mobility and independence, leads to physical activity through walking; reduce social isolation supporting mental health; access to healthcare, social care services and recreational activities, being socially connected. (++) Hybrid working can help older employees balance work with personal life, reducing stress and improving mental health. (-) Hybrid working might also exacerbate feelings of isolation if not managed properly	High			High			High		-Public engagement event 22nd April 2024- importance of the age friendliness. - Cork Age-Friendly City - Cork Healthy Cities program focuses on enhancing public spaces, improving accessibility, and ensuring that older adults can safely and comfortably navigate the city (Cork City Council). -Cork City Council (CCC): Lee to Sea Greenway and the Passage Railway Greenway provides safe and accessible routes for walking and cycling, CCC also working on pedestrian and cycling connectivity improvements, e.g Glanmire Roads Improvement Scheme, ensuring safer and accessible travel routes -SG scoping workshop report 31st Jan 2024- -Cork Age Friendly Cities draft strategy; Cork healthy cities health profile (2018) Rosso 2011; Cerin 2017; Rambaldini-Gooding 2021; Boniface 2015; King 2011; Bonaccorsi 2020); Yeom 2008; Satariano 2012.

	(---) Older employees may now face challenges/stress with digital tools and technologies (--) stress/ respiratory health with overcrowded public transport, therefore, tend to avoid rush hours. (--) noise pollution negatively impact mental health and sleep quality. (--) Enhanced transport accessibility: gentrification, potentially displacing older residents leading to social isolation. (--) shorter commutes could reduce physical activity										Rosso, et al., (2011), Rambaldini-Gooding et al., (2021), Boniface, et al., (2015), King, et al., (2011), Bonaccorsi, et al., (2020), Yeom, et al., (2008), Satariano, et al., (2012).Griffiths et al., (2022), Roy (2022)

STEP 2

Hypothesis	Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented Re: Potential impact ie. Positive or negative (narrative) Narrative- write up)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)
		Positive/ opportunities			Negative/ unintended consequences		
Accessible workplaces with short travel times by public transport improves health by walking to and from bus stops, increases social interaction, and decreases car reliance.	(+) Shorter travel times and reliable public transport boost older adults' independence, confidence, and autonomy. Enhanced mobility reduces sedentary behaviour, promoting physical and mental health (+) Walking to public transport stops promotes daily physical activity, maintaining cardiovascular health, weight management, and muscle strength, preventing chronic conditions like heart disease and diabetes (Bonaccorsi, 2020).	high	Short, medium and long term	Confirmed	high	Short, medium and long term	Confirmed

	(+) Shorter commutes free up time for social interactions, reducing loneliness and enhancing mental health and life satisfaction (Boniface, 2015; King, 2011). (+) Improved public transport ensures easy access to healthcare, social services, and recreational activities, promoting timely medical check-ups and overall well-being (Satariano, 2012) (--) Stress and Respiratory Health Issues: Overcrowded public transport can cause stress and expose older adults to air pollution, worsening mental and respiratory health (Yeom, 2008). (--) Noise Pollution: Increased public transport usage raises noise levels, impacting mental health by increasing stress and disrupting sleep (Boniface, 2015).						

	(--) Gentrification and Displacement: Enhanced transport can lead to gentrification, displacing older residents and disrupting social networks, causing social isolation and stress (King, 2011). (--) Reduced Physical Activity: Shorter commutes may reduce incidental physical activity, increasing the risk of chronic diseases and decreasing physical fitness (Bonaccorsi, 2020).						

YOUNG PEOPLE

STEP 1

Hypothesis	Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence	Health sensitivity to the population (use IPH model page 144)			Magnitude of the impact (use IPH model page 145)			Health significance (sensitivity + magnitude) (use IPH model page 148)			Evidence i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Accessible workplaces with short travel times by public transport improves health by walking to and from bus stops, increases social interaction, and decreases car reliance.	(++) Reduced travel times lower stress, improving mental health and increasing time for social activities and family engagement. This particularly applies to those working hybrid. (++) Public transport accessibility promotes walking and cycling, combating obesity. Walking to and from transport stops contributes to daily physical activity, essential for healthy growth. (++) Shorter commute times encourage active commuting, increasing physical activity in children. Shorter travel times improve healthcare access for children.	H			H			H			Public engagement event 22nd April 2024 The provision of public transport isn't possible for everyone to have a 15-minute city e.g. minors HSE's National Guidelines on Physical Activity; Living Well programme - HSE.ie; Healthy Ireland; National Participation Framework Department of Children; Healthy Ireland initiative HSE; WHO 2022 Scoping workshop report 31st Jan 2024- values and children- how does society value children. CORK FREEDOM OF THE CITY encourage physical activity. Cork City Development Plan 2022-2028: health considerations into urban planning. Cork city profile Home - Cork Healthy Cities2018- reduced car reliance. Monje-Amor, Ariadna, 2023; Kim & Jang, 2023; Zulkefli et al., 2020; Owen et al., 2012; Janssen & LeBlanc, 2010; Fadl & Kheir, 2017; Rodríguez-

	More time from shorter commutes enhances academic performance and social engagement. (++) Active commuting helps maintain a healthy weight and prevent obesity. Shorter commutes enhance independence and social interactions, fostering autonomy. (++) Reliability in short commutes reduces anxiety and stress, improving mental health. Shorter commutes reduce exposure to travel hazards, providing safer experiences. (++) Physical activity in commutes promotes healthier lifestyle choices. Exposure to public transport fosters environmentally conscious behaviours. (--) Free bus travel can increase bus usage but not significantly boost overall active travel, indicating health benefits might require a multifaceted approach. (--) Commute time effects on active versus passive commuting vary based										Rodríguez et al., 2017; Bemanian & Mosser, 2023; Zulkefli et al., 2020; Owen et al., 2012;Fadl & Kheir, 2017; Voulgaris et al., 2017;McDonald, 2008; Janssen & LeBlanc, 2010; O'Connor et al., 2015; DiGuiseppi et al., 1998; Voulgaris et al., 2017; Green et al., 2014; Guthrie & Fan, 2016; Bemanian & Mosser, 2023; Marzi et al., 2018

	on housing density, income, and public transport availability-interventions must consider these factors to maximize health benefits. (--) Parents worry about children's safety on public transport, leading to stress and anxiety due to potential exposure to crime or accidents.										

STEP 2

Hypothesis	Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented Re: Potential impact ie. Positive or negative (narrative) Narrative- write up)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)
		Positive/ opportunities			Negative/ unintended consequences		
Accessible workplaces with short travel times by public transport improves health by walking to and from bus stops, increases	+Physical Health. Mental Health. Social Well-being. Safety and Environmental Benefits. -Impact: benefits of shorter commutes vary based on demographics and socioeconomics; tailored interventions	High	Short, medium, long term	Confirmed	High	Not implemented in short term. Medium to long term	Confirmed

social interaction, and decreases car reliance.	to maximise health benefits for all (Guthrie & Fan, 2016). Events like COVID-19 may reduce public transport usage due to safety concerns, impacting the expected health benefits (Przybyłowski et al., 2021; Luo et al., 2022). Effectiveness depends on quality and reliability of public transport infrastructure. Poorly implemented- not deliver anticipated health benefits (Matthews et al., 2023).						

People living on low-income

STEP 1

Hypothesis	Potential Impact i.e positive/opportunity Or/ and negative/unintended consequence	Health sensitivity to the population (use IPH model page 144)			Magnitude of the impact (use IPH model page 145)			Health significance (sensitivity + magnitude) (use IPH model page 148)			Evidence i.e. review article; technical (policy related); qualitative (public engagement; children artwork) Leading to characterisation of evidence
		High	Medium	Low	High	Medium	Low	High	Medium	Low	
Accessible workplaces with short travel times by public transport improves health by walking to and from bus stops, increases social interaction, and decreases car reliance.	(+)public transport: reduces financial burden of car ownership freeing up resources improving health, timely medical appointments; narrowing health inequities reduce commuter costs and increases job opportunities; improve health outcomes (reduced stress, CV, social interaction), improve mental health and subjective well-being; decrease individuals' exposure to air pollutants. (--) cost of public transport isolates the poor. lower income areas underinvestment in transport infrastructure so longer, complex commutes can negate health benefits.	High			High			High			Public engagement event 22nd April 2024- commuting times reduce can save time and time for recreation and family time and with children (general pops) Healthy Urban Planning: Mixed-Use Communities https://corkhealthycities.com/ WHO (2022) National Transport Authority (NTA), CMATS. BusConnects Cork. Bemanian & Mosser, 2023; Yuan et al., 2022; Veér, 1989; Bemanian & Mosser, 2023; Yuan et al., 2022; Mahmudah et al., 2016; Lachapelle et al., 2016; Laverty et al., 2020; Petter Næss, 2006; Tao et al,2023; Naess, 2006; Glaeser et

	(-) Hybrid working: low incomes may lack access to reliable internet and digital tools, exacerbating the digital divide. (--)Low-income workers might struggle to create ergonomic home office setups due to financial constraints- negatively affecting their health (---) Hybrid working can widen health inequalities if low-income workers lack access to adequate home office setups or digital infrastructure. (--) Safety issues deter walking to and from transit stops, particularly among poorer vulnerable populations like women, the elderly, and children. (--) potential overuse and misuse (vandalism) of public transport; crime										al., 2008. Marston et al., (2021), Williams and Shaw (2024)

STEP 2

Hypothesis	Explaining the pathway to impact, which refers to the health effects and benefits if policy implemented. Re: Potential impact ie. Positive or negative (narrative) Narrative- write up)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)	Significance (sensitivity + magnitude) low; medium; high	Duration (short; medium; long term)	Likelihood of impact (Plausible, probable, confirmed)
		Positive/ opportunities			Negative/ unintended consequences		
Accessible workplaces with short travel times by public transport improves health by walking to and from bus stops, increases social interaction, and decreases car reliance.	(+) Reduced Financial Burden: Timely Medical Appointments. Narrowing Health Inequities. (+) Access to Employment. Improved Health Outcomes. Enhanced Mental Health and Well-being: Shorter and more predictable commutes reduce stress levels, contributing to better mental health. (+) Social Interaction: Public transport facilitates social interactions, reducing feelings of isolation and promoting mental health. (+) Decreased Exposure to Air Pollutants: Environmental Benefits:	high	Short, medium, but what are the long-term effects, unsure	Confirmed	High	Short is out because not implemented right now. Medium- long term	Confirmed

	Reduced reliance on cars leads to lower emissions, improving air quality crucial for low-income families who often live in areas with higher pollution levels. (-) Cost of Public Transport: isolate negating health benefits of improved access. (-) Infrastructure Underinvestment: Result in longer and more complex commutes, reducing the potential health benefits and possibly increasing stress and fatigue. Safety Concerns: (-) Safety issues, particularly in poorer neighbourhoods, deter individuals, especially the vulnerable like women, the elderly, and children, from using public transport or walking to and from transit stops, lead to decreased physical activity and increased reliance on unsafe or unhealthy travel methods. (-) Crime and Vandalism: Potential overuse and misuse of public transport, such as vandalism or crime, can create an unsafe environment affecting health outcomes						

Reasoned conclusion for accessible workplace

"To support the delivery of a 15-Minute City that supports Compact Liveable Growth by creating vibrant local communities that can access all necessary amenities within a 10-minute walk/cycle and access workplaces and other neighbourhoods with a 15-minute public transport journey. Implementation will include walkable neighbourhoods, towns, and communities with mix of uses, house types and tenure that foster a diverse, resilient, socially inclusive and responsive city. This includes support for public and active travel infrastructure projects and services and enhanced neighbourhood permeability. Strategic infrastructure and large-scale developments shall demonstrate how they contribute to a 15-minute city and enhance Cork City's liveability and accessibility." Page 63 of the Cork City Development Plan (2022-2028)."

Determinant: Safe and Cohesive Communities		Sub-Determinant: Accessible workplaces
	Aspect	Text
1	Source of change (Table 07 and 08)	Access to workplaces in the 15-minute is dependent on sustainable and connected active travel routes and use of public transport which would lead to reduced reliance on car use/ car reliance, includes the health implications of changes in road traffic and potentially road works when implementing changes to roads/ including more cycle lanes, affecting: active/ sustainable travel, accessibility, travel times, road safety.
2	Populations affected including vulnerabilities (Table 09)	The general population would be affected, as well as vulnerable groups identified as the focus of this assessment including older people, young people, and people on low incomes. The population groups relevant to this assessment, due to proximity, living in Cork city; young- and older- age vulnerability as potentially more vulnerable travel/ transport users; low-income vulnerability (including people living with socio-economic disadvantage, including those on low-incomes for whom travel costs or alternatives may be limiting when accessing workplaces). Not included as population groups but with potential vulnerability include women, people living with mobility/ accessibility issues; poor health and poor mental health vulnerability; access and geographical vulnerability (people who experience existing access barriers or for whom access barriers to active travel and public transport options in accessing workplaces is limited).
3	Main population health outcomes or measures (column 6, Table 10)	In accessing workplaces within the vision of the 15-minute city, people living in Cork city require public transport options that is appropriate, available, affordable, and accessible for the general population and with particular sensitivity for vulnerable population groups including the groups at the centre of this assessment including people living on low income or and living in areas of social and economic disadvantage, older people and young people. Intersecting with the modes of travel determinant active travel when accessing workplaces through walking or cycling/ wheeling- health effects may be associated with physical health (e.g. cardiovascular health, respiratory health), mental health conditions (e.g. stress, anxiety, depression), associated with levels of physical activity and obesity. In the case where the population groups who are the focus of this assessment have access to active travel routes, then they could expect to

		experience great health gain through physical exercises, reduced social isolation however if paths, roads, and walkways are not appropriate to all users then the health effect is reduced. For public transport- health effects are associated with similar as above for physical and mental health, as walking to bus and from bus stops when accessing workplaces, and social connectivity on buses can increase potential health gain, if paths and walkways are connected appropriate to users (population groups) needs.
4	Any known thresholds for effects	Access to workplaces assumes that active travel, public transport, or car use is required in order to arrive at the workplace destination in time and with ease. Transport air quality and noise effects and their relevant thresholds are assessed separately for example within the statutory SEA conducted on the CCDP.
5	Likelihood/causal pathways (section 1-3 of Figure T06)	The potential effect is considered likely because there is a plausible relationship between source-pathway-receptor: Source: changes in active travel routes and increased number of bus routes (through Bus Connects) in order for people to access workplaces that link community residential and workplaces within the city. Pathways: changes in reduced car use; reduced driver delay and traffic, pedestrian amenity, reduced accidents. This all links with physical activity, active travel, public transport use and reduced social isolation by engaging with public travel space. Receptors: local road and footpath users, cyclists, pedestrians, public transport users, bus drivers, emergency services, people from vulnerable groups across the city including older people, young people and people living on low-income. The scientific and grey literature, and the public engagement data, shows an association between the types of changes that will be caused by implementing the 15-min city, including road and pedestrian safety, travel times, accessibility, active travel and public transport use for the three population groups under focus in this assessment. The assessment has had regard to the population groups identified for the assessment that may be particularly sensitive. Beyond the three identified and included population groups, the literature identifies women, migrant communities, people living with limited mobility and accessibility are vulnerable to changes implemented through the 15-minute city when accessing workplaces. The whole population benefits from a physically active lifestyle through the connected liveable city including using public transport that is accessible, appropriate, affordable, and available, and active travel routes. People living with socio-economic disadvantage, people living on low-income and older people typically face greater barriers in accessing healthcare and medical appointments due to poor public transport options.
6	Context in which professional judgment is reached	The baseline (phase 1 of evidence document) indicates that relevant vulnerabilities and inequalities identified in the scientific and grey literature, and the public engagement data, may be present. Health priorities as set out by the DoH with Healthy Ireland Framework (2013-2025) identifies health challenges for Ireland nationally and for Cork city are relevant for use of public transport and active travel when accessing. These national priorities include supporting active travel to ensuring travel and transport infrastructure that promotes access to workplaces, social inclusion, wellbeing and social connection and reduce rates of obesity and prevent poor health through continued reliance on cars for accessing workplaces.

6.1	Contextual factors relating to acceptability of change in determinant of health for the setting	Government policy the National Sustainable Mobility Policy (setting strategic actions up to 2030 for active travel specific to accessing workplaces) sets out the following expectations for travel and transport in the local area: Principle 2- People focused Mobility: Public transport is placed after cyclists in the road user hierarchy and should be prioritised over other motorised vehicles. By designing accessible walking and cycling infrastructure that easily connect to bus and rail options, we can support 'first' and 'last-mile' active travel journeys from public transport stops to education, workplaces, and for retail, leisure and recreational trips. Expanding behavioural change measures including the Smarter Travel Workplaces and Campus Programmes and Cycle Right training programme. Strategy for the Future Development of National and Regional Greenways While the focus is on tourism and leisure amenities, greenways have potential to enable active travel within local communities and many of the routes funded under the strategy will provide safe segregated routes to schools and workplaces. Healthy Ireland 2013-2025 Encourage active travel and use of public transport option when accessing safe workplaces across population groups. **Local Economic and Community Plan 2024-2029** A City Driving Economic and Enterprise Development, boosting economic development and employment in Cork city. Active travel an objective under 'A city valuing health & wellbeing.' Constraints identified in the LECP for implementing active travel in the city including: Lack of public transport options compared to other European cities. Over reliance on the private car as the primary mode of transport impacts negatively the city's campaign to tackle climate change. (page 47). **Future Jobs Ireland 2019** - Preparing for Tomorrow's Economy Embracing Innovation and Technological Change Improving SME Productivity Enhancing Skills and Developing and Attracting Talent Increasing Participation in the Labour Force-- this pillar is particularly important and relevant to our assessment, as policy supporting and advocating for increased employment across the population of Ireland as a whole and across population groups living with vulnerabilities. Transitioning to a Low Carbon Economy

		National Pathways to Work Strategy, 2021 – 2025 In relation to vulnerable groups, this policy includes ambitious targets to increase the employment rate for groups under-represented in the labour market (people with disabilities, lone parents, and Travellers) and in relation to moving people who are long-term unemployed into sustainable employment.
7	Mitigation secured and/or enhancements secured (for strategic level this may be policy wording edits)	None secured.
8	Baseline change Sensitivity to proposal (Figure T09) Magnitude of change due to proposal And/or magnitude of health change (Figure T11)	The sensitivity of the general population is considered to be low. This reflects that routine statistics for Cork city show that the health status of most people is good/ reported as good, and their daily activities are not limited in accessing workplaces. This estimation reflects that the general population would have a high capacity to adapt to changes in traffic/ public transport/ active travel conditions when accessing workplaces if, for example, road works are required to enhance active travel and public transport routes in implementing the 15-minute city. The sensitivity of vulnerable groups is considered high. It is estimated that, from a life course perspective with particular focus on older people and young people, a high proportion of pedestrians, cyclists, public transport users, and road users with cars in Cork city are young people and older people (people who are in active paid employment) who are reliant on safe and accessible transport and travel options in accessing workplaces. People living on low income and / or living with social and economic disadvantage face greater barriers to access compared to the population as a whole and are more sensitive to changes in access to travel and transport changes when accessing workplaces (for positive and for unintended health impacts). People living on low income may compound barriers to access through travel and transport options when accessing workplaces if the vision of the 15-minute city is not realised. Access to active travel routes and public transport options was an identified issue of concern as established through the public engagement event. The **magnitude of change due to the policy objective and magnitude of health change** is therefore **high**.
9	Professional judgment on significance including an differences between the general populations and vulnerable group population and how these may change over time (Figure T12)	The roll out of the 15-minute city in would have short-, medium- and long-term impact. The population health baseline change is expected to be high as a result of the implementation of the 15-minute city, in terms of high positive impact for health and high potential unintended health impact if appropriate measures are not considered for population groups with vulnerabilities including older people, young people and people living on low-income who require accessible, affordable, appropriate, and available options when accessing workplaces in a connected city. The assessment acknowledges that there is a causal pathway established in the scientific and grey literature, and the public engagement data, relevant health priorities are of specific relevance and there would potentially be a substantial effect on the delivery of local policy expectations, aligning with the actions as set out in the CCPD 2022-2028 and the LECP 2024-2029.

		There would be a differential effect between the population of Cork city as a whole and vulnerable groups; the implementation of the 15-minute city going forward has potential to widen health inequalities for older people, young people and people living on low-incomes if transport options when accessing workplaces are not appropriate, accessible, available and affordable, and if active travel is not continued being rolled out in a safe and appropriate way. The conclusion is that the residual significance of the effect would be negligible for the population as a whole in terms of unintended health impact but significant for positive impact; and significant for both positive and unintended health impact for identified vulnerable population groups. For vulnerable populations, the baseline change is expected to be **substantial** if access to active travel and public transport options in order to enhance access to workplaces were to be achieved for vulnerable populations in particular.
10	Describe any monitoring and adaptive management of likely significant effects	Monitoring continues as part of the CCDP implementation phase; and as part of the HIA monitoring and evaluation plan, decided at the end of the process.

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