ACTIVE TRANSPORTATION

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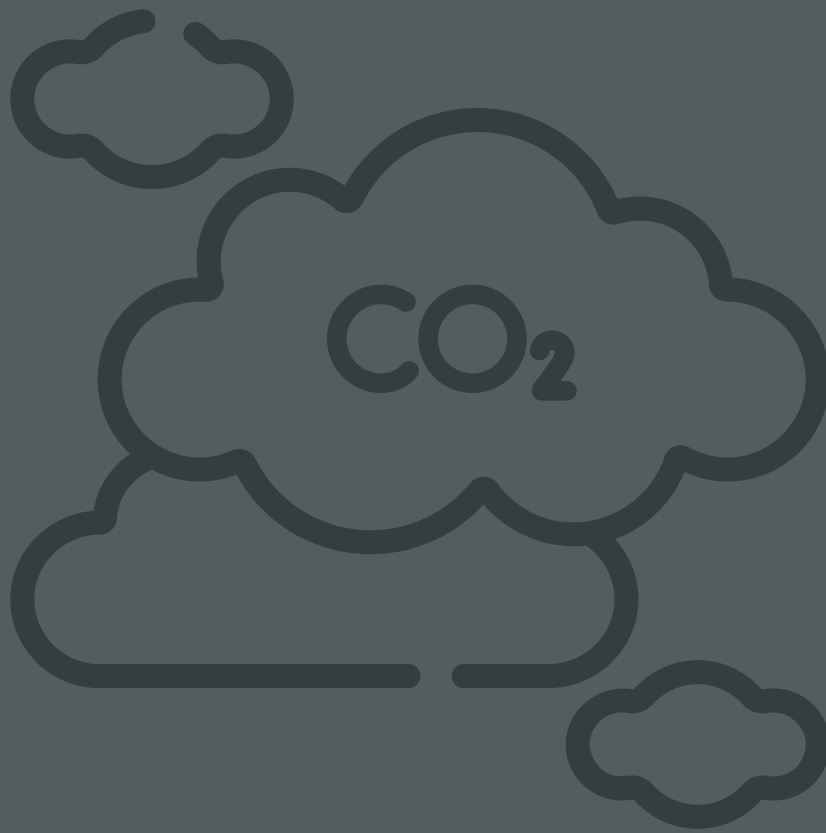
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ACTIVE TRANSPORTATION

Definition

Active transportation or active mobility is defined as utilizing walking and/or cycling for single trips or within a trip in combination with public transport (Gerike et al. 2016; Koszowski et al., 2019). In other words active transportation can be defined as the promotion of walking and cycling as sustainable modes of transportation in urban areas. Active transportation contributes to both sustainable transport and improved health outcomes, since it requires less space, produces fewer emissions, and has lower life cycle costs compared to other modes of transportation, but also promotes physical activity, and contributes to the creation of sustainable and healthy communities (Giles-Corti et al., 2010; Hong, 2018).

References

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Giles-Corti, B., Foster, S., Shilton, T., et al. (2010) The co-benefits for health of investing in active transportation. New South Wales Public Health Bulletin 21(5–6), 122–127.
Hong, A. (2018) Environmental Benefits of Active Transportation. In: Larouche R (ed.) Children's Active Transportation. Elsevier, pp. 21–38.
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CARBON FOOTPRINT

InPlanEd

CARBON FOOTPRINT

Definition

The amount of gaseous emissions that are relevant to climate change (gases with greenhouse effect) and associated with human production or consumption activities. It is usually expressed in mass units (kilograms) of CO_2 equivalent resulting from Global Warming Potential (GWP) or, not that often, from Global Temperature change Potential (GTP). Apart from this widely used way of definition, another one may be found accross the literature. According to this definition, it is defined as the area of productive land (vegetation) required to absorb CO_2 produced during fossil fuel combustion through photosynthesis. In this methodology, the carbon area is usdd as the measurement unit.

References

Wiedmann, T. and Minx, J. (2008). A definition of 'carbon footprint'. In C. C. Pertsova (ed). Ecological Economics Research Trends. Nova Science Publishers, Hauppauge NY, USA. pp. 1-11.
Song, M., Zhang, L., Gao, Y., & Li, E. (2023). Spatiotemporal evolution and influence mechanism of the carbon footprint of energy consumption at county level in the Yellow River Basin. Science of The Total Environment, 883, 163710.

CIVIC ENGAGEMENT

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CIVIC ENGAGEMENT

Definition

Civic engagement refers to the active participation of individuals in their communities and in society. Although the notion has an "urban" dimension, it corresponds in general to the involvement and contribution of individuals to their local communities, city, or countries. It can take various forms from political participation to volunteering.

References

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Nicholls, W. J. (2008). 'The Urban Question Revisited: The Importance of Cities for Social Movements'. International Journal of Urban and Regional Research 32(4), 841–59. https://doi.org/10.1111/j.1468-2427.2008.00820.x.

CLIMATE RESILIENCE

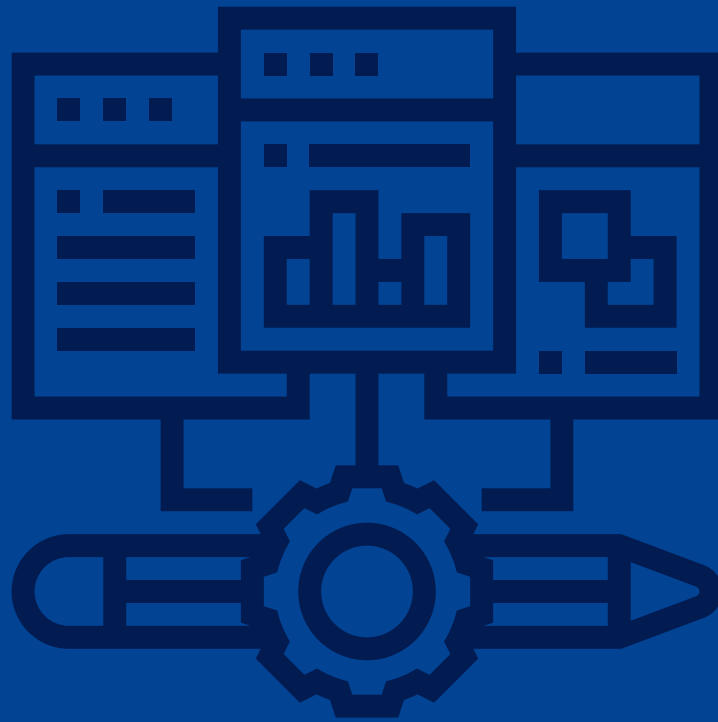InPlanEd

CLIMATE RESILIENCE

Definition

Climate resilience is the capacity of natural, social and economic ecosystems to cope with a hazardous climate event, trend or disturbance by responding or reorganising in ways that maintain their essential function, identity and structure while retaining the capacity for adaptation, learning and transformation.

References

IPCC, 2022: Summary for Policymakers [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem (eds.)]. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3–33, doi:10.1017/9781009325844.001.

DATA-DRIVEN DESIGN

InPlanEd

DATA-DRIVEN DESIGN

Definition

Data-driven design is a design approach that relies on data to inform decision-making throughout the design process. It involves collecting and analyzing data to gain insights into user behavior, preferences, and needs, and using that information to guide design decisions. Examples of data that can be used in data-driven design include user feedback, analytics data, and user research.

References

Khan, A.K. (2012). Impact of Personal Software Process on Software Quality. IOSR Journal of Computer Engineering, 1, 21-25.

EVIDENCE-BASED DESIGN

InPlanEd

EVIDENCE-BASED DESIGN

Definition

Evidence-based design is a design approach that involves using research and data to inform design decisions. It is a process of collecting and analyzing data to gain insights into user behavior, preferences, and needs, and using that information to guide design decisions. The goal of evidence-based design is to create designs that are effective, efficient, and user-friendly. Examples of evidence that can be used in evidence-based design include user feedback, analytics data, and user research.

References

Ragland, R.G. (2016). Implementing an Evidence-Based Reflective Teaching Cycle: Using Scholarly Research in Curriculum Design. Mid-Western educational researcher, 28, 196-217.

HEALTHY CITIES

InPlanEd

HEALTHY CITIES

Definition

A healthy city is one that is continually creating and improving those physical and social environments and strengthening those community resources which enable people to mutually support each other in performing all the functions of life and achieving their maximum potential (World Health Organization, 1998, Health Promotion Glossary).

References

Stephens, C. (2017). Global Issues: Urban Health in Developing Countries, Edited by Stella R. Quah, International Encyclopedia of Public Health (Second Edition), Academic Press, pp. 282–291.

INCLUSIVE CITIES

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INCLUSIVE CITIES

Definition

Inclusive city is a city which without prejudice to economic status, gender, race, ethnicity, or religion provides equal access to social, economic, and political opportunities for all urban residents. Residents are enabled and empowered to share in the growth and prosperity of the city by avoiding marginalization in terms of access to basic urban services, social engagement, and political participation.

References

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INTEGRATED URBAN MODELS

InPlanEd

INTEGRATED URBAN MODELS

Definition

Integrated Urban Models are comprehensive tools based on space syntax theory that provide a holistic understanding of how urban form influences social, economic, and environmental dynamics, aiding urban planners and policymakers in decision-making. They analyse urban environments by integrating among other spatial configuration, transport, land use, and social statistics such as population and employment data, which are assigned various weights according to the study's context.

References

Karimi, K, Parham, E, Acharya, A. (2015). Integrated sub-regional planning informed by weighted spatial network models: The case of Jeddah sub-regional system.

JUST TRANSITION
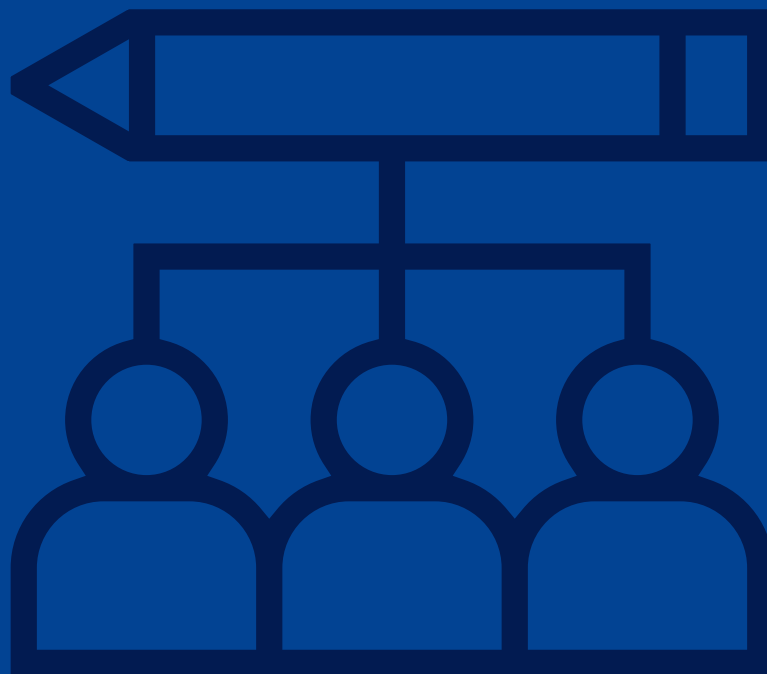
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JUST TRANSITION

Definition

Just transition refers to the efforts of societies to move towards a green economy and low carbon future, with a focus on issues of social justice and equity. The term is widely used the last decade, linked to the intensification of climate change related phenomena and the demand for rapid action, particularly from vulnerable communities. In the context of political ecology, just transition and environmental justice are key terms in a wider critique around politics of climate change and their relationship with neoliberal policies.

References

Bulkeley, H., & Betsill, M.M. (2013). 'Revisiting the Urban Politics of Climate Change'. Environmental Politics, 22(1): 136–54. https://doi.org/10.1080/09644016.2013.755797.
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# PARTICIPATORY PLANNING

InPlanEd

PARTICIPATORY PLANNING

Definition

Participatory planning or community-based planning was initially a movement and later a methodology that emphasized the importance of involving local communities in the planning and decision-making process. The origins of participatory turn in planning can be traced back in the 1960s and the wider critique on post-war redevelopment and modernist hierarchical planning processes. It was a movement that affected widely urban planning, urban design, and architecture.

References

Albert, M., & Hahnel R. (1992). 'Participatory Planning'. Science & Society, 56(1), 39–59.
Davidoff, P. (1965). 'Advocacy and Pluralism in Planning'. Journal of the American Institute of Planners, 31(4), 331–38. https://doi.org/10.1080/01944366508978187.
Krivý, M., % Kaminer, T. (2013). 'Introduction: The Participatory Turn in Urbanism'. FOOTPRINT, 7(2), 1–6.
Sachs, A., Banz, C. & Krohn, M. (2018). Social Design: Participation and Empowerment. Zürich: Lars Müller Publishers/Museum für Gestaltung Zürich.

PEOPLE-CENTRIC DESIGN AND PLANNING
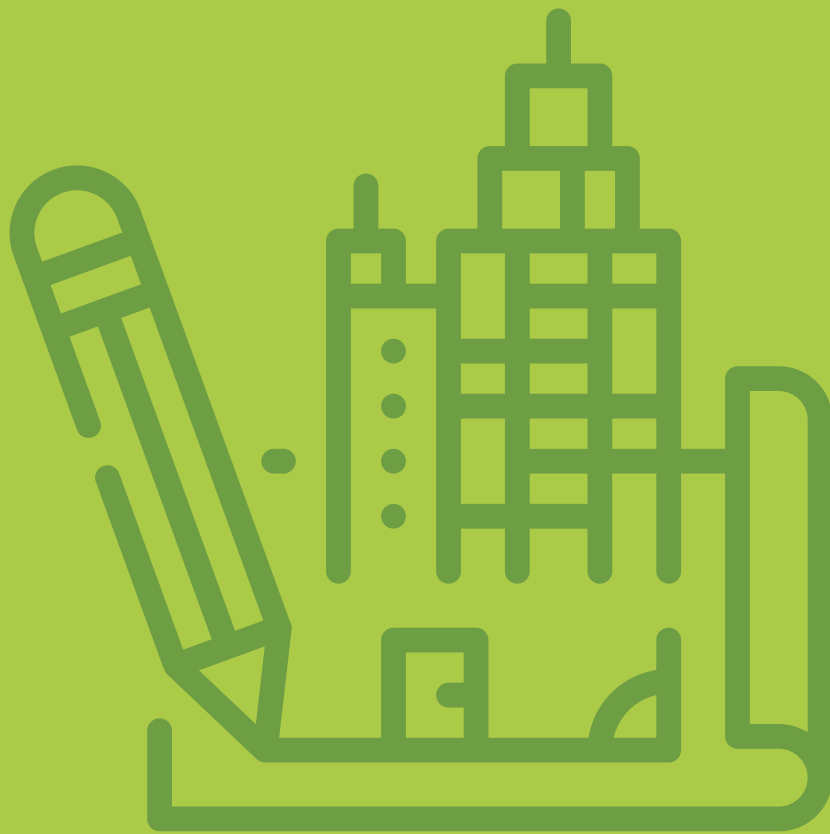
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PEOPLE-CENTRIC DESIGN AND PLANNING

Definition

People-centric urban design and planning is a shift in how we build cities from a car-oriented approach and free-standing buildings to an emphasis on the human beings as the users of public space, by understanding how people experience space and their needs, and providing tailored solutions.

References

Gehl, J. (2010). Cities for People
Vigiola, G., Q. (2022). Understanding Place in Place-Based Planning: From Space- to People-Centred Approaches, Land, 11(11), 2000.
Zhang, T. & Dong, H. (2009). Human-centred design: An emergent conceptual model, Proceedings of the Include2009, Royal College of Art, April 8-10, 2009, London

POST-OCCUPANCY EVALUATION (POE)

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POST-OCCUPANCY EVALUATION (POE)

Definition

Post-Occupancy Evaluation was created for assessing buildings and is commonly used for this purpose nowadays. POE is based on the concept that, by asking users about their needs and experiences in the built environment, better spaces can be designed (Boarin et al., 2018). One of the main definitions for Post-Occupancy Evaluation is the following: (...) the process of evaluating buildings in a systematic and rigorous manner after they have been built and occupied for some time. POEs focus on building occupants and their needs, and thus they provide insights into the consequences of past design decisions and the resulting building performance. This knowledge forms a sound basis for creating better buildings in the future. (Preiser, Rabinowitz, & White, 1988, p. 3.). Although POEs are commonly used in the building scale, there are limited examples of POEs in large scale, including communities, cities and regions despite its highlighted importance by various researchers (e.g. Churchman & Ginosar, 1999, p. 267; Hofer, 2008, p 1-2). As POEs of buildings, the neighborhood scale POEs should also include both quantitative and qualitative assessments, which allows the construction of a multi-layered picture of the state of the neighborhood (Hofer, 2008)

References

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Preiser, W. F., Rabinowitz, H. Z., & White, E. T. (1988). Post-Occupancy Evaluation. New York, USA: Van Nostrand Reinhold.

RESILIENT CITIES

InPlanEd

RESILIENT CITIES

Definition

Resilient cities are capable of withstanding severe shock without either immediate chaos or permanent deformation or rupture. Designed in advanced to anticipate and recover from the impacts of natural or technological hazards, resilient cities are based on principles derived from past experience with disasters in urban areas

References

Godschalk, D. R. (2002). Urban hazard mitigation: Creating resilient cities. Plenary paper presented at the Urban Hazards Forum, John Jay College, City University of New York, January 22–24.
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SMART CITIES

InPlanEd

SMART CITIES

Definition

Smart cities are urban areas that use digital technologies and innovations to improve efficiency, sustainability, and quality of life for citizens. Smart cities rely on the Internet of Things (IoT) to collect and analyze data from various sources, such as sensors, devices, and citizens, to manage resources, assets, and services. IoT technologies enable smart cities to automate and optimize various domains, including transportation, energy, water, waste management, healthcare, and security.

References

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SUSTAINABLE MOBILITY

InPlanEd

SUSTAINABLE MOBILITY

Definition

Sustainable mobility concept envisions a system which meets contemporary road user needs via: i) promoting public transport, walking and cycling, ii) introducing innovative ways of transport (e.g. micromobility and shared transport modes) and iii) restricting car usage and ownership (Banister, 2008; Nikitas, 2018). Sustainable mobility endeavours to create a new ethos in transport provision (Nikitas et al., 2019) improving social equity, economic efficiency and environmental protection (Gudmundsson, 2004).

References

Banister, D. (2008). The sustainable mobility paradigm. Transport Policy, 15(2), 73–80.
Gudmundsson, H. (2004). Sustainable transport and performance indicators. In: Hester, R. E., Hamson, R.M. (Eds.), Transport and the Environment-Issues in Environmental Science and Technology, 20. Royal Society of Chemistry, Cambridge, UK, pp. 35–63
Nikitas, A. (2018). Understanding bike-sharing acceptability and expected usage patterns in the context of a small city novel to the concept: A story of 'Greek Drama'. Transportation Research Part F: Traffic Psychology and Behaviour, 56, 306–321.
Nikitas, A., Wang, J.Y., Knamiller, C. (2019). Exploring parental perceptions about school travel and walking school buses: A thematic analysis approach. Transportation Research Part A: Policy and Practice, 124, 468–487.

SUSTAINABLE URBAN DEVELOPMENT

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SUSTAINABLE URBAN DEVELOPMENT

Definition

A process of synergetic integration, interaction, and co-evolution among the economic, social, physical and environmental subsystems making up a city which guarantees a non-decreasing level of well-being for the city population in the long term while maintaining a balance with the surrounding areas as well as contributing to reducing the harmful effects on the biosphere

References

Tran, L. (2016). An interactive method to select a set of sustainable urban development indicators. Ecological Indicators, 61, 418-427.

SYSTEMS THINKING

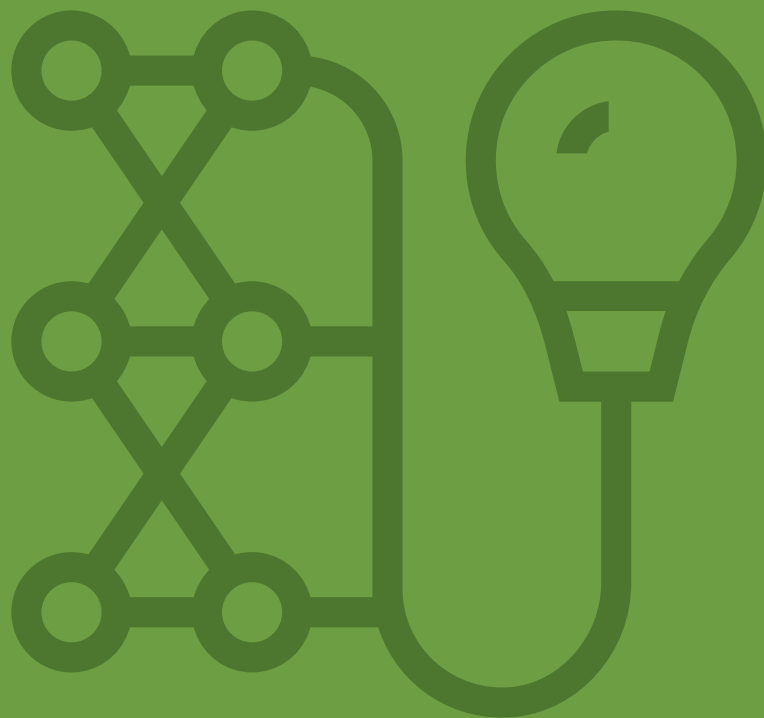InPlanEd

SYSTEMS THINKING

Definition

Systems thinking is a set of synergistic analytic skills used to improve the capability of identifying and understanding systems, predicting their behaviours, and devising modifications to them in order to produce desired effects. Systems thinking in the context of urban planning is an approach that views cities and urban environments as complex, interconnected systems. It emphasises understanding the relationships and interdependencies among various components, such as infrastructure, transportation, social dynamics, and the environment. This holistic perspective helps planners analyse the dynamic and often unpredictable behaviour of urban systems, aiming for more effective and sustainable solutions.

References

Arnold, R. D. , Wade, J. P. (2015) A Definition of Systems Thinking: A Systems Approach.

TRANSDISCIPLINARITY

InPlanEd

TRANSDISCIPLINARITY

Definition

Transdisciplinarity seeks to develop holistic perspectives not only by integrating different disciplinary perspectives, but also extending beyond scientific knowledge to include know how from non-academic sectors, including independent researchers and institutions, the private sector, public administrations, community associations and citizens. It aims at creating new frameworks to understand problems through cross-fertilisation of knowledge and the experiences of people from different backgrounds, for the purposes of co-producing solutions.

References

Doucet, I. & janssens, N. (2011). Transdisciplinary Knowledge Production in Architecture and Urbanism.
Ramadier, T. (2004). Transdisciplinarity and its challenges: the case of urban studies.
Lawrence R. J. (2021). Creating built evnironments: bridging knowledge and practice divides. Introduction.

URBAN ANALYTICS

InPlanEd

URBAN ANALYTICS

Definition

Urban analytics is a term used to describe the collection, analysis, and interpretation of data related to urban areas. It involves the use of digital and physical devices to collect data, which is then processed and analyzed to manage resources, assets, and revenues in urban areas. Urban analytics is a key component of smart cities, which use technology to make cities more efficient, technologically advanced, greener, and socially inclusive. The Internet of Things (IoT) is a key enabling technology for smart cities, allowing the production and automation of innovative services and advanced applications for different city stakeholders.

References

Bellini, P., Nesi, P., & Pantaleo, G. (2022). IoT-Enabled Smart Cities: A Review of Concepts, Frameworks and Key Technologies. Applied Sciences, 12(3), 1607.

URBAN GOVERNANCE

InPlanEd

URBAN GOVERNANCE

Definition

Urban Governance refers to the relations between government and civil society actors involved in the formation, preparation and implementation of urban policies, strategies and projects. This partnership approach emerged during the 1970s, and signifies a shift from hierarchical systems of governance to more bottom-up and cooperative.

References

Brenner, N. (2019). New Urban Spaces: Urban Theory and the Scale Question. New York, NY: Oxford University Press.
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URBAN HEALTH

InPlanEd

URBAN HEALTH

Definition

Urban health reflects the outcomes of the physical and the social environment that impact residents' and communities' well-being and quality of life, within an urban setting.

References

Wuerzer, T. (2014). Urban Health. In: Michalos, A.C. (eds) Encyclopedia of Quality of Life and Well-Being Research. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-0753-5_3127

WALKABILITY

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WALKABILITY

Definition

As Speck indicated in his book "Walkable City" (2012) "walk has to satisfy four main conditions: it must be useful, safe, comfortable, and interesting". In this context, walkability can be described as the quality of urban environment to support and promote safe and pleasant walking for all street users -including people with reduced mobility, women, young children and elderly (Forsyth and Southworth, 2008). However, walkability is an emerging issue -for citizens, researchers, urban/transport planners and authorities- that has evolved into an umbrella term, resulting in various definitions, indicatively mentioned the following: Dovey & Pafka, (2020); Forsyth, (2015); Leslie et al., (2007); Lo, (2009); Talen & Koschinsky, (2013).

References

Dovey, K. & Pafka, E. (2020). What is walkability? The urban DMA. Urban Studies, 57(1), 93–108.
Forsyth, A. (2015). What is a walkable place? The walkability debate in urban design. URBAN DESIGN International, 20(4), 274–292.
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Talen, E. & Koschinsky, J. (2013) The Walkable Neighborhood: A Literature Review. International Journal of Sustainable Land Use and Urban Planning, 1(1), 42–63.

INCLUSIVE PLANNING
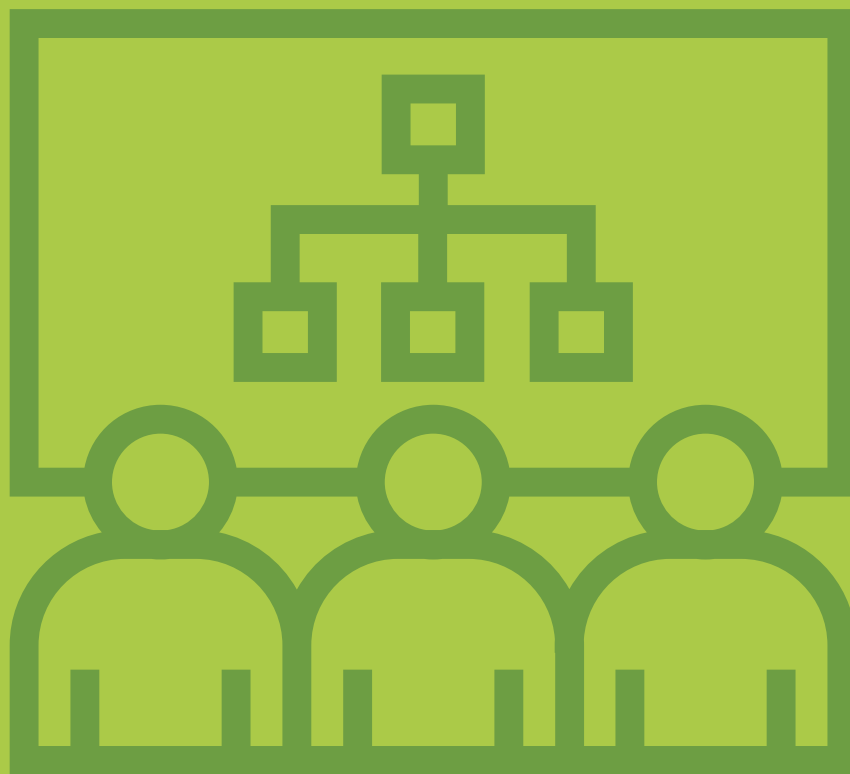
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INCLUSIVE PLANNING

Definition

Inclusive planning involves diverse stakeholders to ensure decisions reflect all perspectives, prioritizing equity and social justice while promoting accessibility and participation. It emphasizes cultural sensitivity, transparency, and accountability throughout the process. Collaboration and trust-building are central, empowering marginalized groups and fostering community ownership. Ultimately, it leads to more equitable and sustainable outcomes, embodying democratic principles by ensuring inclusivity in decision-making.

References

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Jaine A (2014) Integrated Urban Design & Planning for inclusive Public Space and City-Region connectivity and efficiency. UN-Habitat Thematic Issue Paper. Epub ahead of print 2014.