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INTEGRATED URBAN DESIGN & PLANNING FOR INCLUSIVE PUBLIC SPACE AND CITY-REGION CONNECTIVITY & EFFICIENCY

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EXECUTIVE SUMMARY

A number of discussions precede this issues paper, which proposes three targets on how spatially oriented planning and design thinking and action can improve our urban condition. These targets seek to influence the urban agenda that will be established in Habitat III. The roots of this discussion build upon Goal 7 of the Millennium Development Goals.

There are a number of prevailing social, environmental and economic challenges that impact the quality of life in cities. They include: rapid urbanization, concerns of sprawl, our urban and ecological footprints, land tenure, institutional capacity, climate change adaptability, social and community infrastructure, governance, and our ability to remain context sensitive.

Our biggest policy challenge related to spatial planning is countering the widespread assumption that social gain is best obtained as a consequence of economic growth and urban development. To the contrary, desired social outcomes should lead and define the degree and direction of action. In parallel, established governance, regulatory and financial structures continue to limit the viability of new and innovative urban policies.

Given the immense pressure of expected urbanization, (over 60% of the area expected to be urban remains to be built) our foreseeable challenge will be to plan new areas to establish and integrate sustainable environmental, social and economic frameworks faster than people can arrive. This, together with the imperative to retrofit and upgrade our existing urban shortcomings, elevates the need for a coherent global urban agenda.

Despite these difficult realities there are many examples of success. They demonstrate that innovative urban management planning and design strategies can be introduced and maintained, but they require ongoing political will and resources to do so.

In response to these challenges three targets are proposed.

1. The first urges governments to develop strategies that consolidate and reinforce existing urban assets. This target is based upon the idea is that the need for growth can be tempered by managing and re-purposing existing assets in our urban environments. This means preserving and enhancing the physical and social assets in cities. It also has implications on the potential for material recovery within cities or “urban mining”.
2. The second target urges cities to develop pre-emptive and resilient urban design strategies to compensate for known and unknown crises. This need is predicated on growing evidence that many cities will be in increasingly persistent crisis management mode preventing any substantial upgrades to more aspirational goals.
3. The final target focuses on integrating social and cultural infrastructure early in the planning and design of the physical environment. Social sustainability (even resilience) is directly related to the mature community based institutions that develop over time.

Each of these targets will need new metrics and indicators to monitor, evaluate and innovate. An urban SDG reflects the fact that urbanization is a "megatrend" shaping the 21st Century - socially, economically, environmentally - and appropriately elevates cities regions as key focal points in the future Development Agenda. As with the MDGs, establishing an urban SDG will raise awareness throughout the globe and provide a continual spotlight on city-regions as critical for attaining sustainable human development, poverty eradication, universal provision of public services, and place-based integrated strategies to enhance resilience and environmental sustainability through risk prevention and management.

OVERVIEW

This Issue Paper is one of six developed by the Communitas Coalition for Sustainable Cities and Regions in the New UN Development Agenda. The issues papers address key themes concerning the critical role of cities regions in advancing sustainable development in the Post-2015 UN Development Agenda. In the Communitas Coalition, subnational and local practitioners are core partners and there is a multi-stakeholder Advisory Committee in order to ensure that our efforts reflect real-world experience. Each paper identifies a set of potential targets for consideration within an urban Sustainable Development Goal (SDG) and provides a brief discussion of the rationale for the targets and links with other potential SDGs.

This Paper builds on a series of prior discussions reflecting a desire to look at the spatial aspects of urbanization at the regional and city scale, beyond administrative boundaries across different levels of governance. Urban design relates to the smaller scale (1: 200) of the city to its neighborhoods. Urban planning intervenes at the widest scale (1: 10,000), from the city-region to the city itself. Correspondingly, the term inclusivity reflects community orientation in all of its complex dimensions. Efficiency embraces the environmental and resource efficiency impacts upon our landscape and ecosystems.

These themes and proposed targets for a stand-alone Sustainable Development Goal (SDG) draw upon all 7 fundamental shifts detailed in “Urbanization as a Driver for Sustainable Development”, UN-Habitat, March 2013.¹

This effort also responds directly to the needs identified in “The Future We Want”² the Outcome Document of the UN Conference on Sustainable Development (Rio +20), by proposing specific targets related to integrated urban design and planning as part of an overall urban

¹ Urbanization as a Driver for Sustainable Development, UN Habitat Urban Visions No.2, March 2013 , Dr. Joan Clos, Under-Secretary-General and Executive Director UN-Habitat

² Realizing the Future We Want for All, Report to the Secretary-General, UN System Task Team on Post-2015 UN Development Agenda, New York, June 2012, Paragraphs 134-147

Sustainable Development Goal (SDG). Eventually, goals selected through this process will be obliged to develop indicators and prepare preliminary monitoring, evaluation, accountability and resource mobilization methods and means.

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EXISTING CONDITIONS

The integrated urban planning and design issues addressed in this Issue Paper have their roots in Goal 7 of the Millennium Development Goals (MDG's): "Ensure Environmental Sustainability".³ This theme is a natural progression on the urban issues identified and implied in Goals 7D (slums) and 7B (water and sanitation). To elaborate, the most profound way Goal 7's targets of reversing the loss of environmental resources, reducing biodiversity loss, providing safe drinking water and improving the lives of slum dwellers can be achieved is by addressing them within a broader urban context. These problems are part of more complex systems that are deeply intrinsic to our cities. Consequently, concerns can only be effectively addressed by working with complexity at the urban (city) scale and addressing urban challenges in a holistic, proactive manner at the regional scale.

RAPID URBANIZATION

The most dramatic urban change is seen in African and Asian cities.⁴ Here, rapid urbanization places significant stress on the existing social and physical assets of cities, which then strain to keep up with demand. The associated limited technical and financial capacities also remain huge barriers.

SPRAWL & THE URBAN FOOTPRINT

A big casualty of this largely unmanaged growth is an increase in sprawl or, the rapid and uncontrolled consumption of "green fields" or surrounding rural land. A large and spread out urban footprint only further increases costs relating to public infrastructure and related facilities. In particular, the growth of new slums is occurring faster than existing slum issues can be addressed. Such increases in urbanized area are inherently inefficient and translate into unus-

³ The Millennium Development Goals Report, 2013, United Nations

⁴ UN Technical Support Team Issues Brief: Sustainable Cities and Human Settlements
http://sustainabledevelopment.un.org/content/documents/2306TST%20Issues%20Brief%20Cities_FINAL.pdf

tainable mobility patterns, costly infrastructure, jobs-housing imbalances, social segregation and poorly allocated land use patterns. Once established (particularly when settlement is informal or ad hoc), the resulting urban patterns, networks and infrastructure are difficult and costly to repair and improve.

ECOLOGICAL FOOTPRINT

The still relevant concept of the ecological footprint of urban settlement needs to be revived. This means growth and densification strategies need to account not only for balanced open spaces and infrastructure, but also factor in environmental thresholds. There needs to be a concerted effort to prevent ad hoc growth.

LAND TENURE

Further, the lack of secure land tenure severely impacts the poor, minorities and the disenfranchised. Poor economies and planning result in poor environmental conditions, pollution and vulnerability to natural and man-made disasters as well as high ambient levels of air and ground based pollutants and toxics (including industrial waste). The inability to collect and manage waste is a ballooning problem.

INSTITUTIONAL CAPACITY

Institutional capacity, manifested by strategies, policies and enforcement that enable the longer-term spatial management of cities, remains weak.

CLIMATE CHANGE

Moreover, the impacts of climate change threaten our unplanned and unprepared urban environments the most. Clearly rapid urbanization pressures require new and creative methods and means to keep up.

SOCIAL & COMMUNITY INFRASTRUCTURE

Moreover, the lack of social and community infrastructure encourages socially destructive pathologies (i.e. crime, discrimination and abuse). Like poor urban infrastructure, once established, these social dysfunctions also become difficult and expensive to (re)solve.

Such conditions threaten not only the 1 billion slum dwellers worldwide (over 14% of the world's population equaling a third of the developing world's population),⁵ but also, the next and upper tiers of urban dwellers living in better, but still poorly planned and inadequate urban and suburban areas.

GOVERNANCE

A huge impediment to effectively addressing the above are the constraints presented by local, sub-regional and regional governance and decision making structures.⁶ For administrative power structures to effectively govern urbanized and urbanizing populations, they must be inclusive, particularly of those in slums and informal settlements who may not yet have an organized voice. Implementing such inclusive governance structures is quite challenging as it implies the potential dilution of the political power of those already fully engaged in governance, but failure to achieve inclusiveness runs the risk of illegitimacy and social unrest. Overcoming this challenge will require shared commitment and creativity by all involved.

CONTEXT SENSITIVITY

Finally, because the precise mix of urban problems is location-specific, generic solutions culled from successes elsewhere tend to generate problems and mistrust if used out of context. Examples at the city scale include an identical (copy of the UNESCO listed town of Hallstatt,

⁵ Report to the CPR on the Implementation of the MDG Targets Related to UN-Habitat (Slums and Water and Sanitation): Accelerating Progress and Advancing the Development Agenda beyond 2015

⁶ UN Technical Support Team Issues Brief: Sustainable Cities and Human Settlements
http://sustainabledevelopment.un.org/content/documents/2306TST%20Issues%20Brief%20Cities_FINAL.pdf

Austria in Huizhou China or, Thames Town near Shanghai, China (both unoccupied). At the planning scale: New Delhi's failed Bus Rapid Transit emulation of Curitiba and the failed translation of Transit Oriented Design principles in the design of Orestad, Denmark. To be effective, on-the-ground efforts will need to localize macro issues and our broad understanding of them so that solutions can be implemented in a manner pertinent and uniquely tailored to local needs and conditions.

PRE-EMPTIVE PLANNING FOR NEW AREAS & IMPROVING EXISTING CONDITIONS

Because our urban settlement pressures are likely to remain greater than our ability to cope, it may be necessary (and pragmatic) to take a two-pronged approach. First, enhance broad efforts to eradicate systemic problem conditions through strategies that plan ahead of new settlement. This means anticipating and developing carefully balanced and manageable sites that provide adequate (even good and attractive) design and services to the informal areas where new urban residents settle, or are likely to settle. Second, increase efforts to address existing and ongoing inadequacies in urban settlements already in place. Both of these pre-emptive and integrating approaches apply to all segments of urbanizing and urbanized areas (i.e. middle and higher income communities as well).

POLICY APPROACHES

PLANNING PRACTICE, GOVERNANCE, AND SUSTAINABLE OUTCOMES

In varying degrees most urban agglomerations struggle to maintain existing system services, standards and stability. There is a widespread assumption that any intervention that brings or allows economic growth (i.e. more buildings, more people and more jobs) is good. It is assumed that desired social needs and benefits will come as a natural outcome of economic gain and expansion. This attitude renders social benefits as speculative and secondary to the rush for development. To the contrary, desired social goals can only be ensured if they become the primary and driving basis for planning and design. This approach does not exclude economic gain, but also serves to make both economic and social outcomes cumulatively resilient and sustainable.

It should be no surprise that globally most current and long-range planning is oriented towards the encouragement and expectation of new visible physical development (i.e. “if we plan it, it will happen” and, “if we build it, they will come”).⁷ Since the results of such attitudes are mixed, the adamant pursuit of such thinking is more hope oriented than certain. Further, the ability to create adequate and comprehensive urban plans and policies to address such concerns is limited by weak and poorly-coordinated local governance structures, outmoded regulations and inadequate enforcement, and inability to finance the implementation of more adaptive alternatives.

New innovative and exploratory urban policies that are integrating and cross-disciplinary are often constrained by the limitations of the governance, regulatory and financing structures in which they are inserted. For such aspirational changes to be sustaining and effective at the

⁷ “Urban Development & Philanthropy, Challenges and Opportunities in a Changing Paradigm”, November 12, 2013, (Funders Forum on Sustainable Cities, European Foundation Centre), Brussels, Belgium; “Urban Development in a Resource Constrained World: Challenges & Opportunities”, Joschka Fischer & Company, November 14, 2013 Berlin, Germany, presentations by Arun Jain

administrative level, a more comprehensive and system wide change is likely required. This takes collective community and political will. We know that changing long-established administration and entrenched management structures is difficult.

This structural governance problem transverses human settlement needs, planning theory, planning practice, as well as related policies and regulatory structures. If left unattended, this dysfunction will continue to undermine the realization of desired urban sustainable development goals. Under the current and urgent circumstances, sustainable policies need to not only work within the confines of existing structures and hierarchies, but also, be sufficiently aspirational to stubbornly instigate structural organizational and administrative improvements wherever and whenever possible.

BASIC SUSTAINABLE SPATIAL PLANNING PRINCIPLES

In planning and design terms the spatial distribution of urban development continues to bias itself towards human space and place based wants and related economic gains, but not the natural or environment based spatial allowances that would balance them. This reality impinges upon and undermines the land area necessary to maintain a coherent and viable ecosystem capable of supporting human settlement.

The need for balances between the human need for housing, jobs, education, health, food and recreation in an environment of social justice and equity and the natural environment are well established in the natural sciences. For example, to remain viable, habitats need to maintain contiguity, have critical mass and maintain adequate buffer zones from human settlement.^{8 9} In practice, we are largely unable to manage land consumption to meet these requirements or set aside adequate land necessary for such purposes. These and related sensitivities are essential to maintain habitat (flora and fauna), provide climate mitigation and adaptation, protect water,

⁸ Landscape Fragmentation & City-Region Planning, Expert Group Meeting, Barcelona, May 2012, Jochen Jager, (<http://www.unhabitat.org/pmss/listItemDetails.aspx?publicationID=3341>)

⁹ Landscape Ecology Principles in Landscape Architecture and Land-Use Planning, Wenche Dramstad, James Olson and Richard Forman, 1996, Harvard GSD, Island Press

wetlands and watersheds and provide adequate food production (security). This inadequacy remains a critical and ongoing policy shortcoming.

SUCCESSSES

Increased urbanization will result in the loss of more non-urban land. Cities will be challenged to absorb growth with minimal expansion of their boundaries. The predominant first settlement impulse is to look for lower density conditions. To induce higher density living city-regions will not only need to plan within constrained urban boundaries, but they will also need to make the higher density options (alternatives) attractive, well served and safe.

There are several successful examples that encourage dense living. These include energy management strategies in Vauban, Freiburg, Germany; planned urban extensions in Cairo, Egypt; restructuring urban land patterns in Ouagadougou, Burkina Faso; the introduction of mass transit in Bangkok, Thailand; Favela Barrio upgrades in Rio de Janeiro, Brazil; the Najvan & Sofeh Parks project in Isfahan, Iran; and the Honeysuckle Urban Renewal project in Newcastle, Australia.¹⁰

Each of these projects have effectively increased urban density through targeted and enhancing infrastructure improvements. These outcomes have all come from positive policy initiatives and implementation commitments.

Although they remain exceptions, sophisticated successes in restoring balanced human-environment development are increasingly found (e.g., urban farming in Dar es Salaam, Tanzania; watershed management in New York City, US; Cheonggyecheon River restoration in Seoul, South Korea; sustainable land use in Hangzhou, China; climate change sensitive green space adaptation in Berlin, Germany; watershed management in Nueva Vizcaya, Philippines; and biodiversity habitat protection commitments in Zagreb, Croatia).¹¹

¹⁰ Urban Patterns for a Green Economy: Leveraging Density – UN-Habitat , Rafael Tuts, (pages 55-79)

¹¹ Urban Patterns for a Green Economy: Working with Nature – UN-Habitat, Rafael Tuts, (pages 33-58)

Unfortunately the methods and means of such successes do not usually extend beyond their local jurisdictional boundaries to larger regions. There are, however, examples where coherent and effective regional and metropolitan approaches exist.¹² Even in these positive examples, there are often tensions among the different governance entities. The severity of these cross jurisdictional struggles depends upon the various power bases and prevailing governance hierarchies at any particular moment. In the best circumstances well-established institutional roles and responsibilities foster regional and local coherence. These arrangements are most resilient to short-term turbulence caused by competing development interests.

Such examples of good policy structures and cross jurisdictional coherence are encouraging evidence that viable systemic policy frameworks and good governance models are not only necessary, but possible. Duplicating and scaling these successes in other city-regions is essential to ensure broader sustainable outcomes.

¹² Metro, Oregon is the USA's only elected regional government. It provides a unified regional planning and development context with related mandates for 25 cities (including Portland, Oregon) across 3 counties. It embraces an urbanized metropolitan territory of 1.5 million residents.

PRACTITIONER EXPERIENCE

In any urban setting an analysis of its policies, regulatory mechanisms and governance structure does not fully illustrate its successes and failures. Outcomes often defy the prevailing paradigm and are based on the stubborn wisdom (and folly) of many of its influential actors.

In Portland, Oregon it was the insistence of a mayor that allowed the creation of a downtown “free transit” zone in 1975 (known as: “Fareless Square”). In this zone, all public transit services (light rail, bus and streetcar) provided free service to all. The basis for this mandate was an enlightened desire to promote transit ridership and de-emphasize the car without penalizing its use. Over time, this public benefit has had a major role in reducing work day vehicular traffic in the central city area while creating a willing and resilient transit culture. Portland’s Fareless Zone was expanded several times to induce new and adjacent downtown areas to use public transit until its elimination in 2012. The regional transit agency operating in Fareless Square successfully lobbied to remove it because of its impact on its operating budget and service levels. In doing so the original idea of realizing larger mobility gains was superseded by the inability to creatively address shorter sighted operating costs.

A more enduring and successful aspect of regional planning in the Portland metro area has been its Urban Growth Boundary (UGB). Originally mandated by the state legislature in 1973 it was formally established in 1979. In 1992 its management was institutionalized through the creation of “Metro” the United States only elected regional government. Today, this governmental body coordinates urban development over 1.5 million residents in 25 cities (including Portland) in three counties all lying within the UGB.

The long term consequences of holding this growth boundary largely intact and managing growth inside it has realized measurable reductions in vehicle miles traveled, reduced emissions, an increase in urban density gradients and diversified use of farmlands (i.e. organic farmland and vineyard's).

These examples demonstrate that innovative urban management strategies can be introduced and maintained, but require ongoing political will and resources to grow and survive.

PROPOSED TARGETS FOR A STANDALONE SDG

Three targets are suggested. They are influenced by the following professional experiences and observations.

- ▶ Although there is a deep need to eliminate and alleviate undesirable human conditions, our urban reality is that many cities will remain in crisis management mode.
- ▶ Cities tend to undermine their existing assets which can be otherwise capitalized and/or leveraged.
- ▶ Contemporary cities are not normally designed, developed or planned defensively against disaster (man-made or environmental).
- ▶ Planning for economic growth tends to take precedence over planning for improved social outcomes.
- ▶ The physical development of social and cultural infrastructure tends to be an after-thought that is backfilled after ad hoc development (focused on jobs and housing) is in place.

All of the above have spatial consequences, which are now elaborated.

TARGET 1: DEVELOP STRATEGIES THAT CONSOLIDATE AND REINFORCE EXISTING URBAN ASSETS

This target requires more deliberate strategies that explicitly identify and elaborate what urban elements need to be preserved, enhanced and created.

Change and re-purposing are an essential part of the dynamic nature of cities. In a resource constrained world the best form of sustainability is to not consume/build at all. The next best option is to maintain or re-purpose as much of the urban infrastructure that already exists as possible. Often the essential reinforcing elements of livability are lost or compromised in this

process. We know historic areas often become caricatures of their past purpose and functions, vibrant areas lose their appeal and new developments that promise vitality routinely fail. When successful, such efforts help cities stay compact and enhance life within their existing footprints. Failures encourage sprawl, and contribute to a loss in urban livability.

TARGET ELABORATION

This target underlines the need to not only protect and reinforce the existing urban form and function, but also underscores the urgency to find new (and adaptive) ways to use what already exists. Such strategies are essential to minimizing urban expansion into greenfields in both rapidly urbanizing areas and cities in developed environments.

Cities need deliberate strategies to encourage infill (including housing), reintegration of marginal or abandoned structures, re-purposing of declining public spaces and places. These strategies will require new and creative financing, management and maintenance methods along with appropriate regulatory structures and governance.

To compensate for periods of stagnant, slow or negative growth city-regions should consider long-term strategies that encourage the concentration of mutually reinforcing businesses, housing, community resources, open space, recreational amenities schools, and jobs centers. For example, the consolidation over time of dispersed and small (often incremental) retail into mutually reinforcing “main streets” or other compact agglomerations not only improves prospects of their survival, but also creates sustainable urban form. Such long-term shifts reduce reliance on open ended and continued growth as a basis for stability. Such strategies do not preclude growth. In fact, should growth occur in such mutually reinforcing urban configurations, it would add to the successes of what has already been achieved. Outcomes that consolidate and mutually reinforce limited resources are by definition, more resilient.

The fact that cities are huge consumers of resources also means they contain huge amounts of materials that can be recovered. Presently many of these materials are considered expensive disposal problems, other materials are just absorbed, ignored or underutilized. As our global

access to material resources becomes increasingly constrained and expensive, it is likely that the economic and practical ability to “mine” for them in cities will become viable. Consequently pre-emptive strategies to encourage “urban mining” should be developed. Such strategies can reduce continued demands for virgin natural resources and, encourage new manufacturing and job creation. Such approaches help cities depend on less outside their prevailing footprints and help their regional and local economies while becoming more sustainable.

It is possible that such an approach could also help cities stay compact (i.e. become or be spatially “frugal” or concentrated). Recovery gains are understandably larger and more efficient in city-regions and large urban agglomerations.

This target is challenged by the fixed (and often higher) costs of upgrading and adaptively re-using urban materials, structures and areas. It will require new metrics as well as regulatory and financial incentives to make the ideas expressed feasible.

INDICATORS

Potential indicators could include:

- ▶ Measuring the degree of increase (i.e. over time) of urbanized land area.
- ▶ Recording changes in the current amount of entitled zoning (i.e. unbuilt and future entitlement volumes).
- ▶ Creating dispersal indicators (distribution, distance, travel time etc.) between and within retail, jobs, housing and public amenity land uses.
- ▶ Recording rates of leakage (loss of existing structures), against the floor area of repurposed (adapted) urban buildings, recording infrastructure land area lost or retained.
- ▶ Inventories (and estimations) of existing urban material resources.
- ▶ Inventories that record the projected life span of existing buildings and structures
- ▶ Vacancy rates
- ▶ Noli maps (noting the ground plane potential for public space and interaction)

- ▶ Green network and infrastructure assessments (i.e. standardized green and open space area calculations)

All of the above will need well defined and acceptable criteria.

TARGET 2: DEVELOP PRE-EMPTIVE & RESILIENT URBAN DESIGN APPROACHES TO COMPENSATE FOR KNOWN AND UNKNOWN MAN-MADE & ENVIRONMENTAL CRISES

It is important (and realistic) to acknowledge many urban environments will continue to struggle to maintain their existing (albeit inadequate) urban assets. This means to just survive and maintain existing levels of service, cities will need deliberate strategies that anticipate a range of destructive (or negative) forces they may or may not be able to fully anticipate.

A more deliberate strategy towards this end implies that the physical design accommodations needed to counter debilitating occurrences will not only impact the location, design and nature of buildings but also, the urban form and organization (i.e. distribution of land uses, infrastructure and functions) of the city itself.

TARGET ELABORATION

The analogy best embodying this imperative is to imagine a city located on an earthquake fault. Such a city would need to prepare itself for an earthquake of undetermined magnitude potentially destroying an unknown (even significant) amount of the city. The strategic challenge embodied in this target would then be to plan and design this city so that its unaffected parts would not only continue functioning (i.e. retain basic services), but also plan it so that it would have the resources, means and organization to begin to repair and provide emergency relief to the city's damaged sections.

Currently most cities develop disaster management approaches based upon their own resources with a focus on emergency response preparedness. Few contemporary cities are willing and able to adapt for such eventualities. If such an approach is pursued, regional, sub-regional and even national strategies will need to develop uniform and coordinated policies with shared strategic objectives and standards. These must be oriented to improve the spatial planning and design of cities so that to disaster related structural resiliencies become possible. Such approaches would be particularly effective (and easier to implement) for new and rapidly urbanizing areas.

The above analogy (and attitude) applies to cities under threat of climate change (including: floods, drought, temperature shifts), other environmental (including: toxic releases, fires), resource, war, civil unrest or any other infrastructure or system/network failure or collapse.

The challenge for this approach is to ensure that good city design principles or livability are not compromised. This means it will be important to design and plan public infrastructure and social and cultural amenities (re: Target 3) that remain attractive, yet protective and resilient in nature. Better planning and decision support tools will help.

This target implies the need to develop different approaches on how basic services are distributed and provided. It may mean higher upfront investments are necessary to decentralize key essential services (i.e. become highly localized or grid independent), or establish off-site methods and means that ensure uninterrupted critical urban services can be maintained. Viable strategies will vary depending upon the locational realities of each urban setting.

In rapidly changing urban environments, this target places increased emphasis on pre-emptive growth management strategies for informal settlements as well. Although it could be argued that such strategies may accelerate urban migration and growth, the positive side is that areas so planned could potentially become settlement magnets in locations desired by planners.

Finally this target has significant implications for land use allocation. At the district and neighborhood scales, additional land for local serving essential infrastructure will likely be needed.

When integrated with ecologically balanced land uses providing urban storm water management, retention and detention areas, local energy production, urban agriculture, transport heat island mitigation, open space and community spaces (re: Target 1), new city designs will need to be developed to create and maintain desired land use efficiencies (i.e. compactness).

INDICATORS

Potential indicators could include:

- ▶ Distance from utility and service providers
- ▶ Redundancy factors and service overlap areas
- ▶ Compatibility matrixes of service areas
- ▶ Dispersal indicators (distribution, distance, travel time etc.) between and within retail, jobs, housing and public amenity land uses.
- ▶ Urban compactness standards & criteria
- ▶ Uniform standards for urban and suburban categorization
- ▶ Standards for urban inventories
- ▶ Standards for essential services mapping
- ▶ Urban eco-shed (analogous to water-shed) mapping

All of the above will need well defined and acceptable criteria.

TARGET 3: INTEGRATE SOCIAL & CULTURAL INFRASTRUCTURE EARLY IN THE PLANNING & DESIGN OF PHYSICAL URBAN INFRASTRUCTURE

Cities function best when their urban form, pattern and design reflect and are sympathetic to their inhabitants' culture, needs and aspirations. Even today, even the most successful cities struggle to imagine, locate, create, build and maintain adequate social infrastructure. The equitable distribution of and access to such infrastructure remains a continuing challenge.

TARGET ELABORATION

Such infrastructure is embodied in the form of: passive and active open space (including streets),¹³ community and public facilities (i.e. libraries, museums, markets, theatres, performance venues, sports and recreation facilities and similar social venues). It also includes health/ social service/ civic oriented places and spaces (i.e. administration buildings, hospitals, fire stations, police, post offices, banks, transportation nodes, educational institutions, historically significant buildings, monuments and related civic functions).

These structures and venues are the places where the often hard-to-define and elusive “soft social infrastructure” of cities and their communities mature. They make the larger culture of cities viable and supportive of the well-being of those who live in them. When fully integrated into the urban design and urban form of cities, these venues provide efficient and mutually reinforcing “reasons to be there”. In time they become effective and resilient social and civic institutions.

As urbanization pressures increase, the ability to locate, provide for and uphold desirable standards for such infrastructure will become harder. Today, housing and employment centric urban development projects usually take precedence over the need to integrate and co-locate such development with social and culture supporting places and spaces.

To truly act as reinforcing and socially resilient elements, such social infrastructure should not remain a planning afterthought (i.e. occupy residual space after private development has occurred), but rather, be integrated at the earliest conceptual planning stages into the growth and enhancement plans and designs of cities. This implies their distribution, size, location, design, management, maintenance and financing must also be treated as basic services. Back filling these functions into the urban form of cities is always more expensive, often imposing heavy compromises on the communities that would benefit from them. In rapidly developing urban

¹³ “Compilation for Sustainable Cities and Human Settlements in the Sustainable Development Goals (SDGs) within the Post 2015 Development Agenda”, November, 2013, UN-Habitat, Rafael Tuts #5, pg 5 Public Space in Urban Land.

environments, this is all the more urgent and requires early planning and design to accommodate an informal sector which is likely to remain the predominant source of urban growth.

To positively structure and manage the (minimal) conversion of non-urban land under threat from increasing urbanization pressures, pre-emptive planning is essential to ensuring social well-being can be realized.

INDICATORS

Potential indicators could include:

- ▶ Culturally indexed social infrastructure criteria
- ▶ Culturally sensitive social infrastructure development mixes
- ▶ Socially supporting facilities spatial placement standards
- ▶ Standards for urban inventories

All of the above will need well defined and acceptable criteria.

LINKS TO OTHER SDGS

In terms of continuity, this theme draws upon Targets 2 and 3 of “Proposed Sustainable Development Goal”, UN-Habitat, December 2012 ¹⁴ (i.e. urban planning toward the reduction of urban sprawl and the prevalence of urban design and public space, respectively). It also acknowledges Goal 5 of “Global Task Force of Local and Regional Governments for post 2015 and Habitat III”, March 2013 ¹⁵ (i.e. urban planning and design, territorial cohesion, and climate change resilience).

¹⁴ Proposed Sustainable Development Goal, Sustainable Cities and Human Settlements, December 21, 2012

¹⁵ Global Task Force of Local and Regional Governments for Post-2015 and Habitat III, Istanbul, March 2013
(<http://www.unhabitat.org/content.asp?typeid=19&catid=365&cid=384>)

MOVING FORWARD

Until now, there has been little UN emphasis on the spatial planning and design aspects of cities. Ad hoc and poor physical (and spatial) planning compromises the effectiveness of cities to maintain and improve the quality of life of their inhabitants. This also compromises their inherent ability to be more environmental efficient.

It is in this context that an urban SDG with a series of core targets could elevate and focus everyone on the issues embodied in them. There is tremendous gain in doing so. Giving the planning and design community a more direct role is sure to inject fresh and creative thinking into difficult and complex urban problems.

Standards and uniform approaches to urban targets can then be developed, monitored and reported with confidence. Shared experiences, intelligence, methods and means will then have a common platform¹⁶ by which to compare. Elevating selected urban issues offers new opportunities, direction and the ability to mobilize and empower urban actors.¹⁷

Each of the three proposed targets underscore the need for new and creative ways to influence improved urban conditions through better spatial planning strategies and related design.¹⁸ The next steps for refining these proposed targets is to allow review and comment with stakeholders. Once there is consensus within the UN intergovernmental Open Work Group on SDGs on a set of urban SDG targets, the next steps will be to identify which targets would fall under a stand-alone urban SDG and which would be inter-linked with other SDGs areas and to develop specific indicators to measure progress towards these targets, identifying data sources and methodologies for measuring them across countries in a consistent way.

¹⁶ “Why the World Needs an Urban Sustainable Development Goal”, UN SDS Network Thematic Group on Sustainable Cities, September 2013.

¹⁷ UN Technical Support Team Issues Brief: Sustainable Cities and Human Settlements
http://sustainabledevelopment.un.org/content/documents/2306TST%20Issues%20Brief%20Cities_FINAL.pdf

¹⁸ “Compilation for Sustainable Cities and Human Settlements in the Sustainable Development Goals (SDGs) within the Post 2015 Development Agenda”, November, 2013, UN-Habitat, Rafael Tuts #5, pg 5 Public Space in Urban Land