



Srinagar

Smart City Proposal

Annex 2

| | Feature | Definition | Scenario 1 (BASE) | Scenario 2 | Scenario 3 | Scenario 4 (ADVANCED) | Self-assessment of the city (for Pan-City Solution) with regard to each feature | Basis for assessment and/or quantitative indicator (Optional - only if data exists) | Projection of 'where the city wants to be' with regard to the feature/indicator | Input/Initiative that would move the city from its current status to Advanced status (Scenario 4: Column G) |
|---|-----------------------|---|---|--|---|--|---|---|---|---|
| 1 | Citizen participation | A smart city constantly shapes and changes course of its strategies incorporating views of its citizen to bring maximum benefit for all. (Guideline 3.1.6) | The City begins identifies priorities and projects to pursue without consulting citizens. | City undertakes citizen participation with some select stakeholders. The findings are compiled and incorporated in some projects or programs. Very few major decisions are shared with citizens until final projects are unveiled. | City conducts citizen engagement at city level and local area level with most stakeholders and in most areas. The findings are compiled and incorporated in projects or programs. | City constantly conducts citizen engagement with people at each Ward level to incorporate their views, and these shape priorities and development projects in the city. Multiple means of communication and getting feedback such, both face-to-face and online are utilised. The effectiveness of city governance and service delivery is constantly enhanced on the basis of feedback from citizens. | SCENARIO 3 | 1. SMC conducts wards-wise consultation and meetings with all key stakeholders while planning and implementing the initiatives/projects. 2. SMC organises workshops at schools, colleges and universities to get maximum inputs while implementing any programme. 3. SMC uses facebook, whatsapp, twitter, SMC web portal, MyGov web portal to reach to maximum citizens and to interact with the citizens. 4. SMC has publicised the Smart city programme by using various modes of media like print media, television, radio etc. SMC has made the outreach successful through distribution of pamphlets, flyers, installing hoardings and banners in the city. The Inputs have been properly incorporated while preparing the plan. | SCENARIO 4 | 1. It is proposed to establish structured and professional platform to communicate with the citizens not only for planning but during the implementation of projects and programme to be undertaken. 2. IT penetration through app creation & generating awareness among the residents through regular meetings and consultations. |

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| 2 | Identity and culture | A Smart City has a unique identity, which distinguishes it from all other cities, based on some key aspect: its location or climate; its leading industry, its cultural heritage, its local culture or cuisine, or other factors. This identity allows an easy answer to the question "why in this city and not somewhere else?" A Smart City celebrates and promotes its unique identity and culture. (Guideline 3.1.7) | There are few architectural monuments, symbols, and festivals that emphasise the unique character of the city. Built, natural and cultural heritage is not preserved and utilised or enhanced through physical, management and policy structures. | Historic and cultural resources are preserved and utilised to some extent but limited resources exist to manage and maintain the immediate surroundings of the heritage monuments. New buildings and areas are created without much thought to how they reflect the identity and culture of the city. | Historic and cultural heritage resources are preserved and utilised and their surroundings are well-maintained. Public spaces, public buildings and amenities reflect the cultural identity of the city; | Built, natural and intangible heritage are preserved and utilised as anchors of the city. Historical and cultural resources are enhanced through various mediums of expression. Public spaces, open spaces, amenities and public buildings reflect local identity and are widely used by the public through festivals, events and activities. | SCENARIO 2 | 1. Lack of regulation for conservation and preservation of the existing historic and cultural sites. 2. Ill maintenance of the heritage structures 3. Absence of regulatory body for maintenance of historic and cultural sites. | SCENARIO 4 | 1. Restoration and preservation of the heritage structures. 2. Formulation of regulatory body for the conservation, preservation and maintenance of the cultural identities of the City. |

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| 3 | Economy and employment | A smart city has a robust and resilient economic base and growth strategy that creates large-scale employment and increases opportunities for the majority of its citizens. (Guideline 2.6 & 3.1.7 & 6.2) | There are some job opportunities in the city but they do not reach all sections of the population. There are a high number of jobs in the informal sector without sufficient facilities. | There is a range of job opportunities in the city for many sections of the population. The city attempts to integrate informal economic activities with formal parts of the city and its economy. | There are adequate job opportunities for all sections of society. But skill availability among residents can sometimes be a challenge. | There are adequate opportunities for jobs for all sections of income groups and skill levels. Job-oriented skill training supported by the city and by industry. Economic activities are suited to and build on locational and other advantages of the city. | SCENARIO 2 | 1. uneven distribution of commerce 2. shortage of large scale industries, industrial estates to create employment opportunities. 3. Lack of entrepreneurial skills. 4. lack of skill development institutes. | SCENARIO 4 | 1. Designated spaces for informal sector activities. 2. Provisions for vocational training and skill development for urban poor. 3. Promotion of traditional and cultural products at national/international level 4. Introduction of new projects involving foreign investments. |
| 4 | Education | A Smart City offers schooling and educational opportunities for all children in the city (Guideline 2.5.10) | The city provides very limited educational facilities for its residents. There are some schools but very limited compared to the demand. Many schools are in poor condition. | City provides adequate primary education facilities within easily reachable distance of 15 minutes walking for most residential areas of the city. The city also provides some secondary education facilities. | City provides adequate primary and secondary education facilities within easily reachable distance for most residential areas of the city. Education facilities are regularly assessed through - databases of schools including number of students, attendance, and teacher - student ratio, facilities available and other factors. | City provides adequate and high-quality education facilities within easily reachable distance of 10 minutes walking for all the residential areas of the city and provides multiple options of connecting with specialised teaching and multimedia enabled education. Education facilities are regularly assessed through database of schools including number of students, attendance, teacher-student ratio, facilities available and other factors. | SCENARIO 3 | 1. Srinagar is known as the education and knowledge hub of Kashmir region 2. Concentration of state and national level institutes 3. Moderate literacy rate 4. The number of educational institutes, teacher student ratio is as per the norms and guidelines. | SCENARIO 4 | 1. Adequate specialised teaching in both technical and non-technical fields. 2. Establishment of a common portal having data base for all educational institutes. |

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| 5 | Health | A Smart City provides access to healthcare for all its citizens. (Guideline 2.5.10) | Healthcare is difficult for citizens to access - demand for healthcare often exceeds hospitals' ability to meet citizen needs. | The city provides some access to healthcare for its residents but healthcare facilities are overburdened and far from many residents. Access to preventive health care is only easily available for some residents. | City provides adequate health facilities within easily reachable distance for all the residential areas and job centers of the city. It has an emergency response system that connects with ambulance services. | City provides adequate health facilities at easily accessible distance and individual health monitoring systems for elderly and vulnerable citizens which are directly connected to hospitals to prevent emergency health risks and to acquire specialised health advice with maximum convenience. The city is able to foresee likely potential diseases and develop response systems and preventive care. | SCENARIO 4 | 1. Srinagar is known as the health hub of Kashmir Valley 2. Multi-Speciality hospitals, Govt hospitals are in the city 3. Medical College 4. Number of doctors, health services are as per norms | SCENARIO 4 | 1. Up-gradation of existing infrastructure and state of art medical technologies/ technical equipment. 2. Provision to smart ambulance for emergency cases 3. Tele consultation at lower hierarchy health centres to avail better service delivery. |
| 6 | Mixed use | A Smart City has different kinds of land uses in the same places; such as offices, housing, and shops, clustered together. (Guidelines 3.1.2 and 3.1.2) | The city has mostly separated uses and areas are focused either on residential, commercial, or industrial, with little co-existence of uses. The average resident cannot walk to the closest market or shops near his or her home. For almost everyone, going to work or going shopping for basic needs requires a journey by automobile or bus of more than 15 minutes. Land use regulations prevent putting commercial or office locations in residential neighborhoods and vice versa. | In some parts of the city, there is a mixture of land uses that would allow someone to live, work, and shop in close proximity. However, in most areas, there are only small retail stores with basic supplies near housing. Most residents must drive or use public transportation to access a shop for food and basic daily needs. Land use rules support segregating housing, retail, and office uses, but exceptions are made when requested. | Most parts of the city have housing, retail, and office buildings in close proximity. Some neighborhoods have light industrial uses within them (e.g., auto repair, craft production). Land use rules allow for mixed uses. | Every part of the city has a mix of uses. Everyone lives within a 15-minute trip of office buildings, markets and shops, and even some industrial uses. Land use rules require or encourage developers to incorporate a mixture of uses in their projects. | SCENARIO 3 | 1. Majority of households utilise frontage for commercial purposes and the backyard for residential use. | SCENARIO 4 | 1. Comprehensive infrastructure development and developing new areas with adequate mixed use could be the most critical interventions to take city to the advance status |

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| 7 | Compact | A Smart City encourages development to be compact and dense, where buildings are located close to one another and are ideally within a 10-minute walk of public transportation, forming concentrated neighborhoods. (Guidelines 2.3 and 5.2) | The city is expanding rapidly at its periphery into undeveloped land, rural or natural areas, or along industrial corridors - both formally and informally. Formal new development is occurring in a way that is "sprawling," meaning that the buildings spread across a wide area and are far from one another. Residents or tenants find it easier or safer to travel by automobile because it takes a long time to walk between destinations and there are busy roads separating buildings. Large pockets of land in the inner-city are vacant. New developments at the periphery tend to be large-scale residential developments, often enclosed with a gate and oriented to the automobile. | The city has one or two high density areas - such as the city center, or historic areas, where buildings are concentrated together and where people can walk easily from building to building and feel as though they are in center of activity. Most of the city consists of areas where buildings are spread out and difficult to walk between, sometimes with low-density per hectare. Regulations tend to favour buildings that are separated from one another, with lots of parking at the base and set-back from the streets. The city likely has some pockets of under-utilized land in the center. New formal developments at the periphery tend to be large-scale residential developments, often enclosed with a gate and oriented to the automobile. | The city has multiple high density clusters that are easy to walk around where buildings are close together. However, the city actively encourages development to occur on under-utilized parcels of land into high-density, walkable areas. When new formal large-scale development projects happen at the periphery, they are encouraged to be dense and compact, with buildings that are close together and line the streets. The city actively encourages or incentivizes re-development of under-utilized parcels in the inner-city, especially those located close to public transportation. | The city is highly compact and dense, making the most of land within the city. Buildings are clustered together, forming walkable and inviting activity centers and neighborhoods. Regulations encourage or incentivize re-development of under-utilized land parcels in the city center. Buildings are oriented to the street — and parking is kept to a minimum, located below ground or at the back of buildings. Public transport and walking connects residences to most jobs and amenities. Residential density is at an optimal with affordable housing available in most areas. | SCENARIO 3 | 1. Due to topography of the region, the city is expanding in linear manner along major transport corridor. 2. Major residential developments across the city's periphery due to shortage of land availability in the city. | SCENARIO 4 | 1. The city is already compact because of its geographical location. Infrastructure upgradation and efficient management of services is critical to maintain its compactness 2. Enforcement of building bye laws and regulation. 3. 100% extent of walkways, footsteps along the approach roads. |
| 8 | Public open spaces | A Smart City has sufficient and usable public open spaces, many of which are green, that promote | The city has very few usable public open spaces and very few usable green spaces. Available recreational spaces are located far away and are dispersed at long distances | A variety of public open spaces are available in some neighborhoods, but are not available in all the areas of the city or are located far away from residential areas Many of the open | Most areas of the city have some sort of public open space. There is some variety in the types of public spaces in the city. However, public spaces are sometimes | Public open spaces are well dispersed throughout the city. Every residential area and work space has access to open space within 10 minutes walking distance. Open spaces are of various types - natural, | SCENARIO 2 | 1. open spaces are not equitably distributed in the city area. 2. Less exposure for all the age group with respect to | SCENARIO 4 | 1. Development of open spaces as per the proposed Master Plan, maintaining the existing open space and not allowing encroachments shall |

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| | | exercise and outdoor recreation for all age groups. Public open spaces of a range of sizes are dispersed throughout the City so all citizens can have access. (Guidelines 3.1.4 & 6.2) | around the city. The few available public open spaces offer a limited variety of experiences for all sections of population and age groups such as places for sport, places for rest, and places for play. | spaces have access restrictions, or are not well-maintained. A variety of types of public open spaces may be lacking, such as natural areas, green areas, parks, plazas, or recreation areas. | not within easy reach or access of more vulnerable populations and are more restricted in poorer neighbourhoods. | green, plazas, parks, or recreation areas - which serve various sections of people. Public spaces tend to truly reflect the natural and cultural identity of the city. | | existing public open spaces in old city area. 3. Newly developed areas have access to planned green spaces. | | be critical to maintain public open spaces |
| 9 | Housing and inclusiveness | A Smart City has sufficient housing for all income groups and promotes integration among social groups. (Guidelines 3.1.2) | Housing is very limited and highly segregated across income levels. Population growth far exceeds the creation of new housing. The poor live in informal settlements with limited to no access to basic services, and are concentrated in a few areas. The wealthy live in separate enclaves. Those in the middle have few, if any options. | Housing is available at most income levels but is highly segregated across income levels. Population growth slightly exceeds the creation of new housing. The wealthy and the middle class have housing that meets their needs at costs appropriate to their income. The poor live in informal settlements. | Housing is available at all income levels, but is segregated across income levels. The growth of supply of housing almost meets the rate of population growth. Increasingly, lower and middle-income people can find housing in areas that are conveniently located. | A wide range of a housing is available at all cost levels. The supply of housing is growing at pace with population. Affordable, moderate, and luxury housing are found clustered together in many areas of the city | SCENARIO 3 | 1. Housing access is available to all income groups 2. Non state subjects cannot buy land or property in J&K state, therefore there is major thrust on rental housing in Srinagar City 3. Housing Demand and supply is almost matching 4. The slum population is comparatively higher than other cities of the state (16%) and for them state and central govt. have launched various schemes | SCENARIO 4 | 1. Promoting new affordable housing projects in peripheral areas. 2. Notification of circle rates. 3. Framing housing policy targeting all income groups 4. assessment of the rent for the property hired for govt./ official purposes |

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| 10 | Transport | A Smart City does not require an automobile to get around; distances are short, buildings are accessible from the sidewalk, and transit options are plentiful and attractive to people of all income levels. (Guidelines 3.1.5 & 6.2) | Personal automobile centric city with very few modal options. Long trip lengths for daily commute to work and education. Accessing various areas by walking or cycling is difficult. Women and vulnerable sections find it very difficult to move independently in the city. There is limited public transport. Vehicles cause high air and noise pollution levels in the city. Vehicles dominate public spaces and affect their effective functioning. | The street network system is elaborate but public transport choices are restricted. Public transport can be too expensive or unaffordable for the poor. Pedestrian infrastructure is only available in select areas. The majority of investments focus on reducing traffic congestion through the creation of more roads. | Network of streets are fairly complete. Public transport covers most areas of the city. However last mile connectivity remains incomplete and affects transport options. Foot paths are accessible in most areas, whereas concerns of safe crossings and security throughout the day remain. Parking zones are demarcated but absence of pricing increases over utilization of parking lots. | Street network is complete and follows a clear structure. Public transportation network covers the entire city and intensity of connection relates with the demand. Plenty of options of public transport are available and affordable for all sections of the society. There is multi-modal integration at all mass transit stations and organized-priced on street and off street parking. Walking and cycling is prevalent. | SCENARIO 2 | <ol style="list-style-type: none"> 1. City bus service exists. 2. Lack of Mass Rapid Transit System. 3. Encroachment on existing roads. 4. Inadequate traffic infrastructure and signals. 5. Inadequate street lights in the city. 6. Limited corridors for walking 7. Only few option for public transport. 8. Few existing roads are not in good condition. | SCENARIO 4 | <ol style="list-style-type: none"> 1. Reducing the traffic congestion by introducing intelligent traffic lighting system 2. Signalling major congestion points 3. Provision of parking facilities 4. Upgrading the public transportation facilities. 5. Dedicated pathways from major city bus stands along approach roads. 6. establishment of smart bus stops in the entire city |

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| 11 | Walkable | A Smart City's roads are designed equally for pedestrians, cyclists and vehicles; and road safety and sidewalks are paramount to street design. Traffic signals are sufficient and traffic rules are enforced. Shops, restaurants, building entrances and trees line the sidewalk to encourage walking and there is ample lighting so the pedestrian feels safe day and night. (Guidelines 3.1.3 & 6.2) | The city is designed mainly for the automobile. Daily life without a car requires long bus rides. Walking is difficult and often dangerous; there are few pavements, existing pavements need repair and lack trees to provide shade for pedestrians, and marked pedestrian crossings are rare. New buildings have their main entrances set-back from the street, sometimes with large driveways or parking lots separating them from the street, and sometimes are enclosed by gates. Traffic signals are often disobeyed | Older areas of the city see a mix of pedestrians, cyclists, and vehicles but newer areas are focused mainly on the automobile. In the new areas, there are few pavements and main entrances to new buildings are not accesible from the front of the street. large driveways or parking lots often separating them from the street, and sometimes are are enclosed by gates. In these areas, traffic signals are disobeyed. | The city has a good network of pavements and bike lanes. Buildings in most areas of the city are easily accessible from the pavement. However, traffic signals are sometimes disobeyed and it can feel difficult to cross the street. | The city is highly walkable. Pavements exist on every street and are maintained. Trees line many sidewalks to provide shade for pedestrians. Buildings in most areas of the city are easily accessible from the sidewalk. Traffic signals control the flow of automobiles and are enforced. A network of bike lanes exists to promote cycling as a means of transport. Traffic rules are followed and enforced with great seriousness. | SCENARIO 1 | Down Town and Older area pedestrian friendly, At present due to lack of traffic management, these routes are jammed with vehicular traffic. | SCENARIO 4 | 1. Development of pedestrian pathways 2. Establishment physical infrastructure for pedestrian 3. Enforcement of traffic laws. 4. Notification of non-motorized zones mainly in old city area |
| 12 | IT connectivity | A Smart City has a robust internet network allowing high-speed connections to all offices and dwellings as desired. (Guideline 6.2) | City has no major plans to bring increased high speed internet connectivity to the public. | The city has made plans to provide high speed internet connectivity through the existing framework. | The city makes has high speed internet connectivity available in most parts of the city. | The city offers free wifi services to provide opportunity for all the citizens to connect with high speed internet across the city. | SCENARIO 2 | 3g broadband connectivity is available in the city but the coverage is 47% | SCENARIO 4 | 1. Availability of 3g connectivity from 47% to 100%. 2. Upgradation of 3g to 4g 3. Availability of Wi-Fi hotspots catering to whole of the city. |

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| 13 | ICT-enabled government services | A Smart City enables easy interaction (including through online and telephone services) with its citizens, eliminating delays and frustrations in interactions with government. (Guidelines 2.4.7 & 3.1.6 & 5.1.4 & 6.2) | Essential Government services are not linked with online platforms. Paper intensive interactions with the local Government continues. Receiving services and response to citizen complaints take a long time. There is limited availability of data to monitor service delivery. | Some of the public services are provided online and infrastructure for total digitalization is not in place. Service delays occur regularly in some sectors. Responses to citizen inquiries or complaints are often delayed. No integration between services and billing. | Most of the services are provided online and offline. Data transparency helps monitoring. System and processes to better coordinate between various Government agencies are being developed. | All major services are provided through online and offline platforms. Citizens and officials can access information on accounting and monitor status of projects and programs through data available on online system. Robust data infrastructure system shares information and enhances internal governmental coordination. | SCENARIO 2 | 1. E-services for Birth Certificate, Death certificate, IT Empanelment, duplicate certificate, school registration has been launched but other essential services needs to be included. | SCENARIO 4 | Provision of e-services is under progress for other sectors. |
| 14 | Energy supply | A Smart City has reliable, 24/7 electricity supply with no delays in requested hook-ups. (Guideline 2.4) | There is only intermittent electricity supply with regular power shedding. Many residents have to plan their days around when power is available. | Electricity supply and loads are managed as per demand and priority for various functions with clear scheduling, with electricity being available in many areas for most hours of the day. | Electricity is available in most parts of the city for most hours of the day but some areas are not so well-served. Smart metering exists in some parts of the city but not all. | Electricity is available 24 x 7 in all parts of the city with smart metering linked to online platforms for monitoring and transparency. | SCENARIO 3 | 1. There is regular power supply but there are some power cuts in a day. 2. Overhead transmission lines are present 3. Total coverage of electricity is 100% of the existing population 4. Energy losses reduced during last three years. | SCENARIO 4 | 1. Implementation of smart metering system. 2. Conversion of OHT to underground cabling. 3. Increment of coverage to 100% of the households 4. Provision of smart grid system |

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| 15 | Energy source | A Smart City has at least 10% of its electricity generated by renewables. (Guideline 6.2) | The city does not have any renewable sources of energy and there is no commitment to promote this for the foreseeable future. | The city is preparing plans for ensuring that it gets more energy from renewable sources and is in the process of making commitments in this regard. | Some energy consumed is the city is produced through renewable sources. There are long term targets for higher renewable energy capacities and the city is making plans to achieve these. | At least 10% of the energy used in the city is generated through renewable sources. The city is undertaking long-term strategic projects to tap renewable sources of energy in its region/beyond to increase the percentage of renewable energy sources. | SCENARIO 2 | 1. Hydro power provision 2. no solar energy provision | SCENARIO 4 | 1. All institutional, residential and commercial units should be enforced to have proper rooftop solar power panels. 2. Provision of solar energy plants. 3. The state govt has already notified the policy for generating, transmission and distribution of solar energy |
| 16 | Water supply | A Smart City has a reliable, 24/7 supply of water that meets national and global health standards. (Guidelines 2.4 & 6.2) | The city has a poor water supply system with limited water availability. There are no clear targets to achieve higher quality and optimal quantity standards. Unaccounted water loss is above 40% | The city has intermittent water supply and availability. However it is setting targets and processes in place to try to improve its water supply. Unaccounted water loss is less than 30%. | The city has 24 x 7 water supply in most areas but the quality of water does not meet international health standards. Unaccounted water loss is less than 20%. | The city has 24 x 7 treated water supply which follows national and global standards and also available in sufficient quantity and affordable across all sections of the society. Unaccounted loss less than 15%. | SCENARIO 2 | 1. The existing water pipeline network is very old, due to which unaccounted water loss is immeasurable. 2. Existing water supply is 104 lpcd 3. 94% of city is connected to the PHED water connection. 5. No metered connection 6. NRW 35% 7. drinking water supply through pipeline is for 90 minutes/day | SCENARIO 4 | 1. Installation of new water pipeline network across the city 2. Installation of SCADA system. 3. Coverage should be increased to 100% 4. Connecting city to a new water source to meet the future water demand. 5. Installation of smart meter at city level. 6. Installation new water storage tanks. 7. Upgrading water treatment plant 8. Utility duct for laying of underground water pipelines |

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| 17 | Water management | A Smart City has advanced water management programs, including smart meters, rain water harvesting, and green infrastructure to manage stormwater runoff. (Guideline 6.2) | The city does not measure all its supply. It does not recycle waste water to meet its requirements and rain water harvesting is not prevalent. Flooding often occurs due to storm water run-off. | The city has meters for all its water supply but lacks mechanisms to monitor. Water wastage is very high. Some, but not much, rainwater harvesting exists. | The city has meters for all its water supply with some smart mechanisms to monitor. Rainwater harvesting systems are installed and storm water is collected and stored in water bodies. However, recycling of waste water and reusage of storm water is limited. | The city has meters for all its water supply. It includes smart mechanisms to monitor remotely. Rainwater harvesting systems are installed and utilised through the city and storm water is collected and stored in water bodies and treated for usage. Recycled waste water is supplied for secondary uses. | SCENARIO 1 | 1. No metering in residential areas even in commercial and industrial areas metering has not been done for all the buildings. 2. 35% NRW due to leakage 3. No rain water harvesting | SCENARIO 4 | 1. Metering is being done in industrial and commercial areas 2. Metering in residential areas will be started 3. Provision of rain water harvesting in all the buildings, there is already a provision of rain water harvesting at all non-residential buildings in Municipal byelaws 4. Entire city to be covered with adequate drainage network |
| 18 | Waste water management | A Smart City treats all of its sewage to prevent the polluting of water bodies and aquifers. (Guideline 2.4) | The city is unable to treat all its sewage. Many local sewer lines open on to water bodies and open ground and pollute the environment. | Most waste water is collected and treated before before disposal. However the treated water does not meet standards and is not recycled for secondary uses. | All the waste water is collected and treated before before disposal. It is also treated to a high standard and some is recycled. | The city has zero waste water because all the waste water is collected, treated and recycled. It meets standards and reduces the need for fresh water. | SCENARIO 1 | 1. City is not equipped with waste water management system 2. All existing drains need repair. 3. Untreated waste water mix with ground water and also discharge into the water bodies making them contaminated | SCENARIO 3 | 1. Decentralised septage and sludge management system 2. Installation of waste water recycling plant 3. developing sewerage network for the left out areas of the city 4. Provisioning of adequate number of sewerage treatment plants 5. Enhancing floriculture in the city through utilisation of non-potable water from WTP. |

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| 19 | Air quality | A Smart City has air quality that always meets international safety standards. (Guideline 2.4.8) | City does not have plans, policies or programs to improve the air quality. Systems to monitor air quality are absent. | City has programs and projects to monitor air quality and spatialising the data to ascertain reasons for degrees of pollution in the air. A few strategies to decrease air pollution have been implemented. | City has programs and projects to monitor air quality and spatialising the data to ascertain reasons for degrees of pollution in the air. Pollution levels are acceptable. | The city has clean air by international standards. Live Air quality monitoring cover the entire city and data of air quality are mapped. | SCENARIO 3 | Air pollution indicators are under the permissible limits | SCENARIO 4 | Regulatory framework shall be in place for adherence to pollution control levels |
| 20 | Energy efficiency | A Smart City government uses state-of-the-art energy efficiency practices in buildings, street lights, and transit systems. (Guideline 6.2) | City has no programs or controls or incentive mechanisms to promote or support energy efficiency in buildings | The city promotes energy efficiency and some new buildings install energy efficiency systems that track and monitor energy use and savings. | Most new public buildings install energy efficiency systems and some older buildings are also retrofitted to be more energy efficient. Local government conducts counselling and outreach with developer, businesses and residents to adopt energy efficiency strategies | All the existing old and new public buildings employ energy efficiency principles in development and operation and apply for energy rating by national and international forums. Many non-public buildings are also energy efficient because the government promotes energy efficiency through incentives and regulations. | SCENARIO 2 | 1. No Solar Power provision 2. Energy efficient street light project is in pipeline 3. Lack of funds to promote solar lighting in the city | SCENARIO 4 | 1. Enforcement of rooftop solar power panels for all residential, commercial and institutional buildings in the city 2. Replacing all the street lights with the energy efficient LED bulbs 3. Distributing energy efficient LEDs to the household on heavily subsidised rates for promotion of energy efficient lights |

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|----|-----------------------------|--|---|--|---|---|---|--|---|---|
| 21 | Underground electric wiring | A Smart City has an underground electric wiring system to reduce blackouts due to storms and eliminate unsightliness. (Guideline 6.2) | City does not have plans for underground electric wiring system. | More than 40% of the city has underground electric wiring system. | More than 75% of the city has underground electric wiring system. | More than 90% of the city has underground electric wiring system. | SCENARIO 1 | 1. At present there is no underground electric cabling in the city. 2. Projects of underground ducting are at planning stage in Srinagar | SCENARIO 3 | Installation of new underground electric cabling system |
| 22 | Sanitation | A Smart City has no open defecation, and a full supply of toilets based on the population. (Guidelines 2.4.3 & 6.2) | Many parts of the city do not have access to sanitation infrastructure and facilities. | Sanitation facilities are available to 70% of the city's population. | Sanitation facilities are available to 90% of the city's population. | Sanitation facilities are available to 100% of the city's population. | SCENARIO 3 | 1. 35% of households have toilet facility within premises 2. Frequency of cleaning of septic tank is poor. | SCENARIO 4 | 1. Coverage of sanitation will be extended to 100% 2. Frequency of septic tank clearance should be regularised |
| 23 | Waste management | A Smart City has a waste management system that removes household and commercial garbage, and disposes of it in an environmentally and economically sound manner. (Guidelines 2.4.3 & 6.2) | Waste collection systems do not pick up waste on a frequent basis and waste often enters into water bodies. | Waste generated is usually collected but not segregated. Recycling is attempted by difficult to implement. | Waste is segregated, collected, recycled and disposed in an environmentally sound manner. | The city reduces land fill caused by waste so that it is minimal. All the solid waste generated is segregated at source and sent for recycling. Organic waste is sent for composting to be used for gardening in the city. Energy creation through waste is considered. | SCENARIO 2 | 1. Door to door waste collection coverage is 60% 2. Waste collection is 90% 3. Zero segregation of solid waste 4. solid waste treatment facilities are absent | SCENARIO 4 | 1. door to door collection to be increased to 100% 2. Promotion of waste segregation at source 3. Provision of Solid waste treatment facilities by way of establishing waste to energy and waste to compost plant |

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|----|---------------------|--|---|---|---|--|---|--|---|---|
| 24 | Safety and security | A Smart City has high levels of public safety, especially focused on women, children and the elderly; men and women of all ages feel safe on the streets at all hours. (Guideline 6.2) | The city has low levels of public safety - most groups of residents feel insecure during most parts of the day in many parts of the city. | The city has medium levels of public safety - some more vulnerable groups feel insecure during some points of the day and in some parts of the city | The city has high levels of public safety - all citizens including women, children and the elderly feel secure in most parts of the city during most time in the day. | The city has very high levels of public safety - all residents feel safe in all parts of the city during all hours of the day. | SCENARIO 3 | 1. Adequate number of security personnel 2. Well-equipped security forces 3. Installation of CCTV cameras at strategic locations for surveillance purposes | SCENARIO 4 | 1. CCTV coverage of the whole city 2. Accident Management Portal 3. Incident Reporting Portal for the whole city. |