

ANNEXURE 1

S. No	Feature	Definition
1.	Citizen participation	A smart city constantly adapts its strategies incorporating views of its citizens to bring maximum benefit for all. (Guideline 3.1.6)
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)
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)
4.	Health	A Smart City provides access to healthcare for all its citizens. (Guideline 2.5.10)
5.	Education	A Smart City offers schooling and educational opportunities for all children in the city (Guideline 2.5.10)
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)
7.	Compactness	A Smart City encourages development to be compact and dense, where buildings are ideally within a 10-minute walk of public transportation and are located close together to form concentrated neighborhoods and centers of activity around commerce and services. (Guidelines 2.3 and 5.2)
8.	Open spaces	A Smart City has sufficient and usable public open spaces, many of which are green, that promote 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)
9.	Housing and inclusiveness	A Smart City has sufficient housing for all income groups and promotes integration among social groups. (Guidelines 3.1.2)
10.	Transportation & Mobility	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)
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)
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)

13.	Intelligent 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)
14.	Energy supply	A Smart City has reliable, 24/7 electricity supply with no delays in requested hookups. (Guideline 2.4)
15.	Energy source	A Smart City has at least 10% of its electricity generated by renewables. (Guideline 6.2)
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)
17.	Waste water management	A Smart City has advanced water management programs, including wastewater recycling, smart meters, rainwater harvesting, and green infrastructure to manage storm water runoff. (Guideline 6.2)
18.	Water quality	A Smart City treats all of its sewage to prevent the polluting of water bodies and aquifers. (Guideline 2.4)
19.	Air quality	A Smart City has air quality that always meets international safety standards. (Guideline 2.4.8)
20.	Energy efficiency	A Smart City promotes state-of-the-art energy efficiency practices in buildings, street lights, and transit systems. (Guideline 6.2)
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)
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)
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)
24.	Safety	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)

ANNEXURE 2

Self-Assessment Form

**Attach self-assessment format given in supplementary template (Excel sheet),
with columns I-L duly filled**

ANNEXURE 2: SELF ASSESSMENT CHECKLIST - VELLORE

S.No	Standard	Definition	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Self Assessment(where we are)	KPI	Projection	Input or initiative that moulds the city to achieve advanced status
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 by identifying 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 germ feedback such, both face-to-face and online are utilized. The effectiveness of city governance and service delivery is constantly enhanced on the basis of feedback from citizens.	Scenario 3	The city has extensively consulted with the citizens for developing the City Developmental Plan (2013), City Mobility Plan (2014). The city also consults citizen's opinions through organisations such as the Lions and Rotary. The city has established a "COMMUNITY PARTICIPATION LAW" as a part of City Development Plan <i>Source: City Development Plan for Expanded Vellore Municipal Corporation, June 201</i>	Scenario 4	The plan seeks to ease interactions with its citizens through development of two way communication public information systems in key locations of the city, mobile apps for enabling integrated grievance redressal framework and auto-escalation mechanisms and open data portals
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	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	The city enjoys a rich heritage - India's first Mutiny for independence, Tipu Mahal, Hyder Mahal, Muthu mandapam - Sri Lakan last ruler's remains & Many more). Currently encroachments are observed in select areas disregarding heritage nodes. For ex: Fish Market, vegetable market & 100% commercial area expansion around vellore fort	Scenario 4	The plan envisages to position its heritage as its central theme for development. All the new development in the city will be designed around a heritage network along with special features to enhance each heritage node
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	The city is a service driven economy. SIDCO has established a number of industrial estates in the Vellore City's periphery accessible in less than 30 minutes (Katpadi-7.8 Km, Ranipet-27 Km, Mukundarayapuram-22.8 Km and Vannivedu-28 Km). The towns Ranipet, Ambur and adjoining areas are estimated to account for over 37% of the Leather and Leather related product exports from India. <i>Sources: TANSIDCO</i>	Scenario 3	Creation of a incubation hub and Immersive Learning Centre will enable the city emerge into an R&D hub for engineering sciences
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, 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 multi media 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	Vellore is the only non-metro city that holds 2 top higher education institutes. Literacy rate in Vellore is 86.67% which is higher than the National (urban) average of 84.9% which also reflects the greater reach of educational facilities. The city constantly collects data from schools and has an existing program with WB to establish e-governance module for School Management Systems <i>Source: City Development Plan for Expanded Vellore Municipal Corporation, June 2013</i>	Scenario 4	Creation of student friendly ecosystem to ease understanding of concepts through digital and practical learning can enhance the learning experience to students. The city should also move towards digitalizing existing records and end to end E-governance module to enhance informed decision making capabilities of the government

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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 centres 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 3	The response time of the ambulance services is less than 5 minutes. With India's premiere health service - Christian Medical College Hospital; the city caters to at least 1 lakh medical tourists every year. The city has an overall 175 healthcare services and is in easy reach to citizens in less than 1 km reach from any point of the city <i>Source: City Development Plan for Expanded Vellore Municipal Corporation, June 2013 and Primary Interaction with City Health Officer</i>	Scenario 4	Integrated healthcare monitoring systems should be in place that tracks citizen's health records and predicts potential disease and develops response systems and preventive care
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 coexistence 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 neighbourhoods 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 neighbourhoods 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	On an average the number of households per ward in Vellore is 1874.15. However, some of the highly densed commercial zones have showcased increase in density of households; For ex: Ward 26 (CMC) - 2724, Ward 04(VIT) - 1759.5, Ward 48(Golden Temple) - 2140.5. <i>Source: Ward Wise Population Data, Vellore City Municipal Corporation</i>	Scenario 4	A clear set of DCRs to guide land use pattern with strong preference for mixed use and ease of access to office buildings and markets will be established
		A Smart City encourages development to be compact and	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.	The city has one or two high density areas - such as the city centre, 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 centre 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 underutilized land in the	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	The city is highly compact and dense, making the most of land within the city. Buildings are clustered together, forming walkable and inviting activity centres and neighbourhoods. Regulations encourage or incentivize re-development of underutilized land parcels in the city centre. Buildings are oriented to the street - - and parking is kept to a minimum, located below				A clear set of DCRs to guide land

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7	Compact	dense, where buildings are located close to one another and are ideally within a 10-minute walk of public transportation, forming concentrated neighbourhoods. (Guidelines 2.3 and 5.2)	New developments at the periphery tend to be large-scale residential developments, often enclosed with a gate and oriented to the automobile.	centre. New formal developments at the periphery tend to be large-scale residential developments, often enclosed with a gate and oriented to the automobile.	encourages or incentivizes re-development of underutilized parcels in the inner-city, especially those located close to public transportation.	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 2	The Current FSI is around 1.5 and the density of settlement around the primary development corridor is low (Bangalore Chennai National Highway) and characterless.	Scenario 3	use pattern along with a strong emphasis on development of settlements based on the principles of TOD around the primary and secondary development corridors is critical.
8	Public open spaces	A Smart City has sufficient and usable public open spaces, many of which are green, that promote 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)	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 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.	A variety of public open spaces are available in some neighbourhoods, but are not available in all the areas of the city or are located far away from residential areas Many of the open 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.	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 not within easy reach or access of more vulnerable populations and are more restricted in poorer neighbourhoods.	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, 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.	Scenario 2	The city has 102 open spaces earmarked for park development, however most of these location lack green cover today. Open space availability in the city is 0.95 Sq.m/person and open space availability in built up area is 1.20 Sq.m/person against benchmark of 10-12 sq. m per person and 2 sq.-m per person respectively. <i>Source: Atal Mission for Urban Rejuvenation (AMRUT) - SLIP, Vellore, November 2015</i>	Scenario 4	The city should move towards CITY FOREST model promoting dense green cover areas in the city. Also, parks and playgrounds to be created in every locality to serve various sections of society such that adequate public space is created to encourage space for social interactions in the city
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 2	Vellore corporation is part of the Integrated Slum Development Programme. 513 houses have been identified in the first phase with a total investment of INR 1093 lakhs. Over 112 houses have been developed (21.38%) with an average plinth area of 28 sqm <i>Source: Vellore City Municipal Corporation, Progress Report - October 2015</i>	Scenario 3	The city should develop new land parcels to ensure adequate supply of housing for different income classes. Programmes for in-situ development of low cots housing facilities through convergence with RAY and IHS DP schemes is already underway
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. That 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	Intra-city mobility is facilitated by Key Arterial roads in the city and are highly congested with an average peak-hour waiting time of 12 minutes. The city has 2381 autos per 1 lakh population; one of the highest auto to person ratio in India. The comprehensive city mobility plan states that about 70% of citizens have high preference for private vehicles. Close to 30% of inner street networks are about 3m wide thus making it hard to implement large feeder systems. <i>Source: Comprehensive Mobility Plan (CMP) for Vellore Local Planning Area, July 2014</i>	Scenario 4	The Smart city plan has a special focus on catalysing a modal shift from private to public transportation modes with assured last mile connectivity, open data platforms on availability of next bus service in every locality and lesser commutation time across the city. The city should also ease mobility within the city for floating population by ensuring multi-lingual display boards in bus fleet and public information display boards

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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 accessible from the front of the street. large driveways or parking lots often separating them from the street, and sometimes 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	Less than 2% of the streets are covered with foot paths. <i>Source: Comprehensive Mobility Plan (CMP) for Vellore Local Planning Area, July 2014 & Atal Mission for Urban Rejuvenation (AMRUT) - SLIP, Vellore, November 2015</i>	Scenario 3	The plans seeks to create over 20 kms of walking & cycling lanes that are interconnected and the cycle sharing units which have facilities like water dispensaries and connectivity
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 Wi-Fi services to provide opportunity for all the citizens to connect with high speed internet across the city.	Scenario 2	All the BSNL connectivity plans that are available at the state capital are available in Vellore. <i>Source: Primary Interaction with General Manager, BSNL</i>	Scenario 4	The city offers free Wi-Fi services to provide opportunity for all the citizens to connect with high speed internet across the city.
13	Intelligent 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 systems 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	The corporation is working on implementing about 29 E-governance modules. While Birth and death certificate accessibility is already available online, others are either in the testing phase or to be developed. All the 29 modules are expected to be completed by June 2016. <i>Source: Primary interaction with the Commissioner of Vellore City Municipal Corporation</i>	Scenario 4	The city moves towards 100% E-Governance services with efficient ICT monitoring and citizen feedback systems and all the individual departments interact with each other to improve overall urban governance
14	Energy supply	A Smart City has reliable, 24/7 electricity supply with no delays in requested hookups. (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 2	Electricity supply is managed as per the demand. There are 8 scheduled outages and 18 unscheduled outages per month. <i>Source: Letter from Superintending Engineer, Vellore Electricity Distribution Circle - November 2015</i>	Scenario 4	Electricity is available 24 x 7 in all parts of the city with smart metering linked to online platforms for monitoring and transparency.
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 in 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 1	Approximately 75 kW of electricity is generated through the solar panels from the government buildings. Roof-top solar panels on Government building is only available on 5 of the 10 Amma canteens. <i>Source: Primary interaction with the Commissioner of Vellore City Municipal Corporation</i>	Scenario 4	The city develops a comprehensive ENERGY EFFICIENCY policy and encourages its commercial establishments to move towards 100% rooftop solar systems

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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	The combined water scheme has helped the city deliver water at a frequency of 2 days cycle from an earlier 5-9 day cycle. Only 51% of the allocated funds have been put to use and the city envisages to reach the National Standards of water supply per capita (135 LPCD) & NRW (15%) by FY2019 <i>Source: Atal Mission for Urban Rejuvenation (AMRUT) - SLIP, Vellore, November 2015</i>	Scenario 4	The City delivers 135 LPCD of water to its citizens with 100% of the water being tested to meet national standards in all times of the day
17	Water management	A Smart City has advanced water management programs, including wastewater recycling, smart meters, rainwater harvesting, and green infrastructure to manage storm water 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 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 reuse 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	The city does not meter water consumption patterns at the delivery level. The City has invested on construction of 10.28 MLD capacity of STP however is likely to begin its operations from FY2016-17. Presently, the city does not recycle its wastewater. The City has invested on construction of 10.28 MLD capacity of STP however is likely to begin its operations from FY2016-17. <i>Source: Atal Mission for Urban Rejuvenation (AMRUT) - SLIP, Vellore, November 2015</i>	Scenario 4	The city ensures to monitor water consumption patterns of all its connections; ensures 100% rain water harvesting in all new developments in the city and predicts flooding in areas/parts of the city due to blockages in storm water drains in the city
18	Waste water management	A smart city treats all of its sewerage 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 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 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	The current UGSS proposal covers 5.75 sq km of the total 87.915 sq km. The omitted areas are to be covered in phase 2. A total of 60.76 km in road is covered out of the 649.69 km. <i>Source: Consultancy Report for Underground Sewerage System</i>	Scenario 4	The city ensures 100% recycling of all wastewater generated in the city and takes initiative to reuse at least 10% of recycled wastewater
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 spatializing 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 spatializing 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 1	The city has not yet planned for air quality monitoring in its boundary	Scenario 3	Smart city plan proposes installing real-time monitoring of air quality in the city and disseminates real-time data through Mobile App + web based air quality monitoring systems
20	Energy efficiency	A Smart City promotes 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 1	AT&C losses reductions programs are being carried out under R-APDRP Scheme. Substation improvements, energy accounting, replacement of 96542 energy meters to static meters. <i>Source: Letter from Superintending Engineer, Vellore Electricity Distribution Circle - November 2015</i>	Scenario 3	The City develops ENERGY EFFICIENCY policy and encourages all its existing and new built environment to move towards energy efficiency principles with adequate incentive structures

S.No	Standard	Definition	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Self Assessment(where we are)	KPI	Projection	Input or initiative that moulds the city to achieve advanced status
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	The city is predominantly dependent on overhead cabling and has 0% coverage of underground wiring in the city. Also, the city has no plans for development of underground cabling in the city as on Nov, 2015 <i>Source: Letter from Superintending Engineer, Vellore Electricity Distribution Circle - November 2015</i>	Scenario 3	The city envisages to establish underground cabling in the delineated area and create a model that may be replicated in other parts
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	Sanitation facilities are available to 99.5% of the city's population. <i>Source: Primary interaction with City Health Officer</i>	Scenario 4	The city ensures that sanitation facilities are available to 100% of households wherever in-situ development is possible and will ensure community based models to congested areas devoid of sanitation facilities. The city also proposes to move towards ICT for reporting cleanliness of public & community toilets. In ASI restricted areas and mobile toilet facilities
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	Day to day waste collection is done in 85% of the areas. But the collected waste is not segregated but dumped in the corporation dump yard. 300 tons of waste is produced on a daily basis. Decentralised segregation is practiced in 10 out of the 60 wards. <i>Source: Primary interaction with City Health Officer</i>	Scenario 4	The plan seeks to ensure 100% segregation of waste at source and encourage end-to-end monitoring solution for waste management systems in the city. The city should also ensure 100% recycle/reuse of potential waste generated in the city
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	Number of crime cases in the city is 4716. Vellore contributes to 2% of the state total and 0.3% of the national total. <i>Source: Primary Interaction, District Superintendent of Police, Vellore Circle</i>	Scenario 4	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 by provision emergency response systems. The city also ensures to reduce the incident response time to less than 1 minute.

ANNEXURE 3

Twenty sheets (A-4 and A-3) of annexures, including
annexures mentioned in questions 32, 34, 36

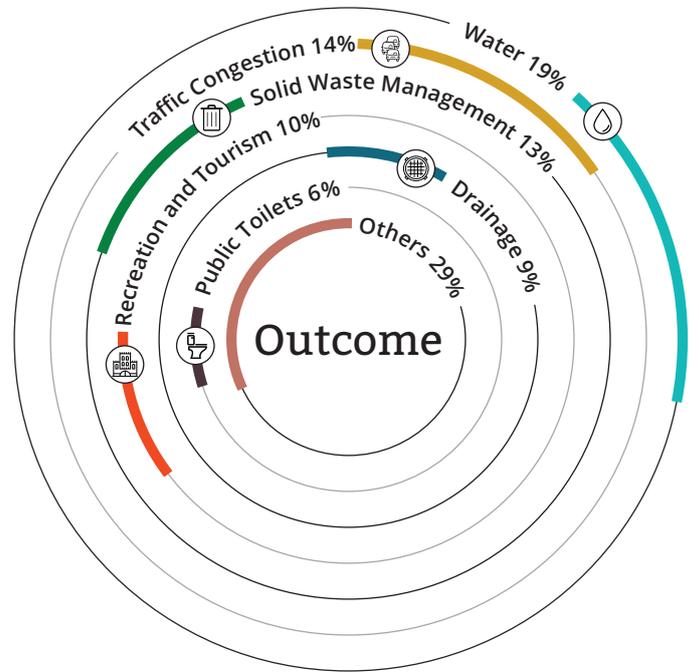
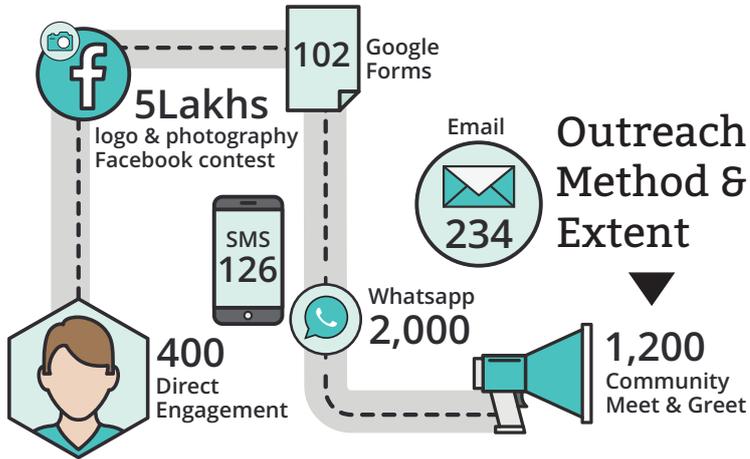
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Citizen Engagement

Vellore

CAPTURE

Vision and Pan City Priorities



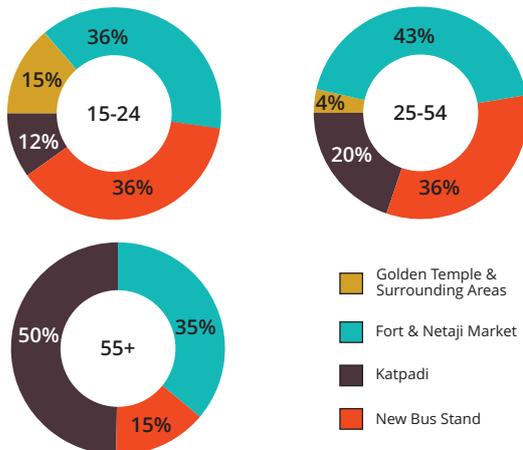
Vision



INVESTIGATE

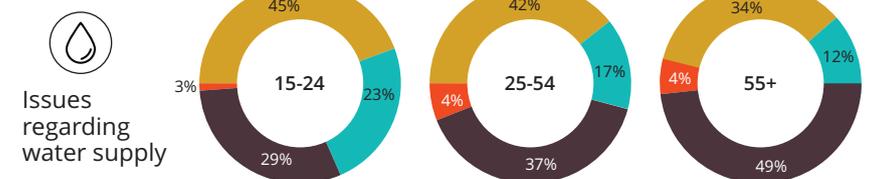
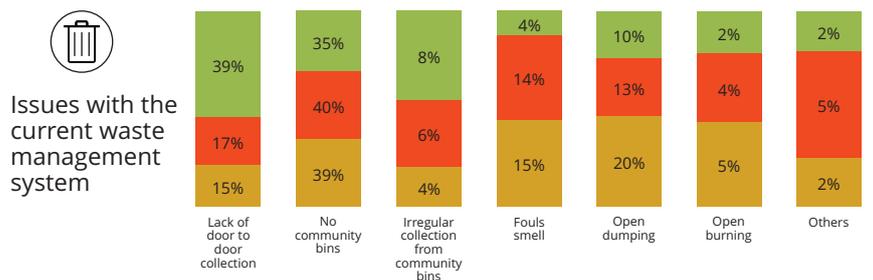
Pan City Priorities

Preferred areas for Area Based Development



Outreach Method & Extent

85,000 Survey Forms



VALIDATE &

DISSEMINATE

15 Interactions with educationalists and experts

32 Private vendor feedback sessions

85000 Outreach via FB polling

120 Representatives from line department consulted

220 Citizens engaged through meet and greet at Gandhi Statue (fort)

5200 Councilor led zone wise citizen meets

ANNEXURE 3.1.B

Direct Engagement with Citizens



Direct Engagement

Online Engagement

Outreach

ANNEXURE 3.2.A

Online Engagement with Citizens

Will you use Bus more frequently **NOW?**



HIT LIKE 



Like 

if you want segregated dustbins outside every house in Vellore?



Photography Competition



Logo Design Competition



ANNEXURE 3.2.B Outreach to Citizens

REGION

THE NEW INDIAN EXPRESS
CHENNAI TUESDAY 13 OCTOBER 2015

Smart City Project Calls for Citizen Champs

Five volunteers from each of the 60 wards will be selected to act as an interface between the public and the Smart City project team for innovative ideas

by V NarayanaMurthi

Vellore: The Vellore Smart City project team has invited citizens to don the role of volunteer 'Citizen Champions' from each of the 60 wards in the corporation who can interact with the public and serve as an intermediary between the team and the public for conveying innovative ideas and suggestions for turning Vellore into a Smart City.

Project consultant Vinod Ramnarayan, while address-

ing Velloreans assembled to interact with Mayor Karthiyayini in this regard at the Corporation office on Saturday said, "We want at least five volunteer champions from each of the wards who can interact with the residents and represent their views for turning Vellore into a smart city besides coordinating with the project team."

Citizens' Champions would be an extended arm of the smart team consultation team. They should be able to

mobilise suggestions and opinions and convey them to the planners. He said that as part of the first-level interaction with around 600 persons across the city in the past three weeks, "we were able to get some direct feedback".

Majority of the suggestions revolved around better roads, easing of traffic congestion, the need for recreation, tourism improvement, handling waste disposal effectively, friendly bus-stands all of which will contribute to

making Vellore 'smart'.

Mayor Karthiyayini, while explaining the purpose of citizen interaction, pointed out that suggestions should aim to enhance a smarter way of living and specifically requested citizens not to turn the airing of suggestions into a grievance meet.

Citizens were requested to come up with innovative ideas that will make life easier. A few citizens suggested the building of multi-storied housing projects at Kazhinjur which was mooted

some time back that would improve living conditions for the poor. They also suggested the extension of railway services from Arakkonam to Vellore that would improve commuting services for office-goers and business persons.

On Saturday, a workshop was also organised by the corporation on Solid and Liquid Waste Management (SLWM) at Darling Residency hotel. Solid Liquid Resource Management (SLRM) expert Vellore Srin-

ivasan who addressed the members of the corporation council, hotel association, traders, residence welfare organisations, NGOs, SHGs explained the need to process waste within six hours of it being generated.

He said 70 percent of the total waste generated in the city is from commercial houses, markets, government offices, marriage houses all of which can be recycled and reused at source. For handling domestic waste, a small space is required to

process them. He said that entire the city could be split into five zones for the purpose of establishing SLRM centres where waste can be converted into useful resource. Srinivasan said that he had also visited the Saduperi garbage dump and has devised a plan to convert the yard into a resource centre.

Citizens interested in donning the role of Citizens' Champions should contact Vinod Ramnarayan at 99408 60453.

Tue, 13 October 2015
epaper.newindianexpress.com/c/6865974

Vellore Corporation Invites Suggestions from Residents for Smart City Makeover

Vellore: Vellore Corporation is inviting constructive ideas from the general public to develop Vellore into a truly Smart City. Corporation officials along with the Smart City planning consultants will station themselves at the Gandhi Statue near the Fort at 5 p.m.

which requires a new approach. After consulting with all stakeholders and assessing the service gaps, the next phase will be about the projects following which convergence and implementation will be planned.

Mayor Karthiyayini said she had participated in a meeting that was chaired by ensuring transparency



» TODAY'S PAPER » TAMIL NADU
VELLORE, December 12, 2015

Smart City outlay for Vellore prepared

STAFF REPORTER

PRINT · T

Tweet | Share | Share

The Vellore Corporation has prepared an overall outlay of Rs. 1,445 crore along with viable projects: Union government's Smart City Mission.

The projects were presented before the Corporation council on Friday for its approval. For the area-

மேம்பட்ட செயற்கள் > மாவட்ட செயற்கள் > வேலூர்
வேலூரை 'ஸ்தார்' சிட்டி'யாக்கும் திட்டம்: பொதுமக்களிடம் கருத்து கேட்க பேஸ்புக், இணையதள வசதி கமிஷனர் தகவல்

கருத்துகள் 0 வாசிக்கப்பட்டது 101 பிந்தி 0 | Like | 0 | Share / Save

வேலூர், வேலூரை 'ஸ்தார்' சிட்டி'யாக்கும் திட்டம் குறித்து பொதுமக்களிடம் கருத்து கேட்பதற்காக பேஸ்புக், இணையதள வசதிகள் ஏற்பாடு செய்யப்பட்டுள்ளது என்று வேலூர் மாநகராட்சி கமிஷனர் ஜானகி தெரிவித்தார்.

ஸ்தார் சிட்டி இந்நியாவில் 100 நகரங்களை ஸ்தார் சிட்டியாக (மிடுக்கான நகரம்) மாற்ற மத்திய அரசு முடிவு செய்துள்ளது. இதில் தமிழ்நாட்டில் தேர்வுசெய்யப்பட்ட 12 நகரங்களில் வேலூரும் ஒன்றாகும். ஸ்தார் சிட்டியாக்கப்படும் நகரங்களின் கமிஷனர்களுக்கான கூட்டம் சர் (கமி) வகாரா மக்கில் வந்தது. இதில் விருந்தினர்களை வேலூர் வடிகால்புறக்காரர்களின்



NATIONAL » TAMIL NADU
Updated: December 1, 2015 05:48 IST
VELLORE, December 1, 2015

Netizens chirp in with smart ideas for Vellore on Facebook

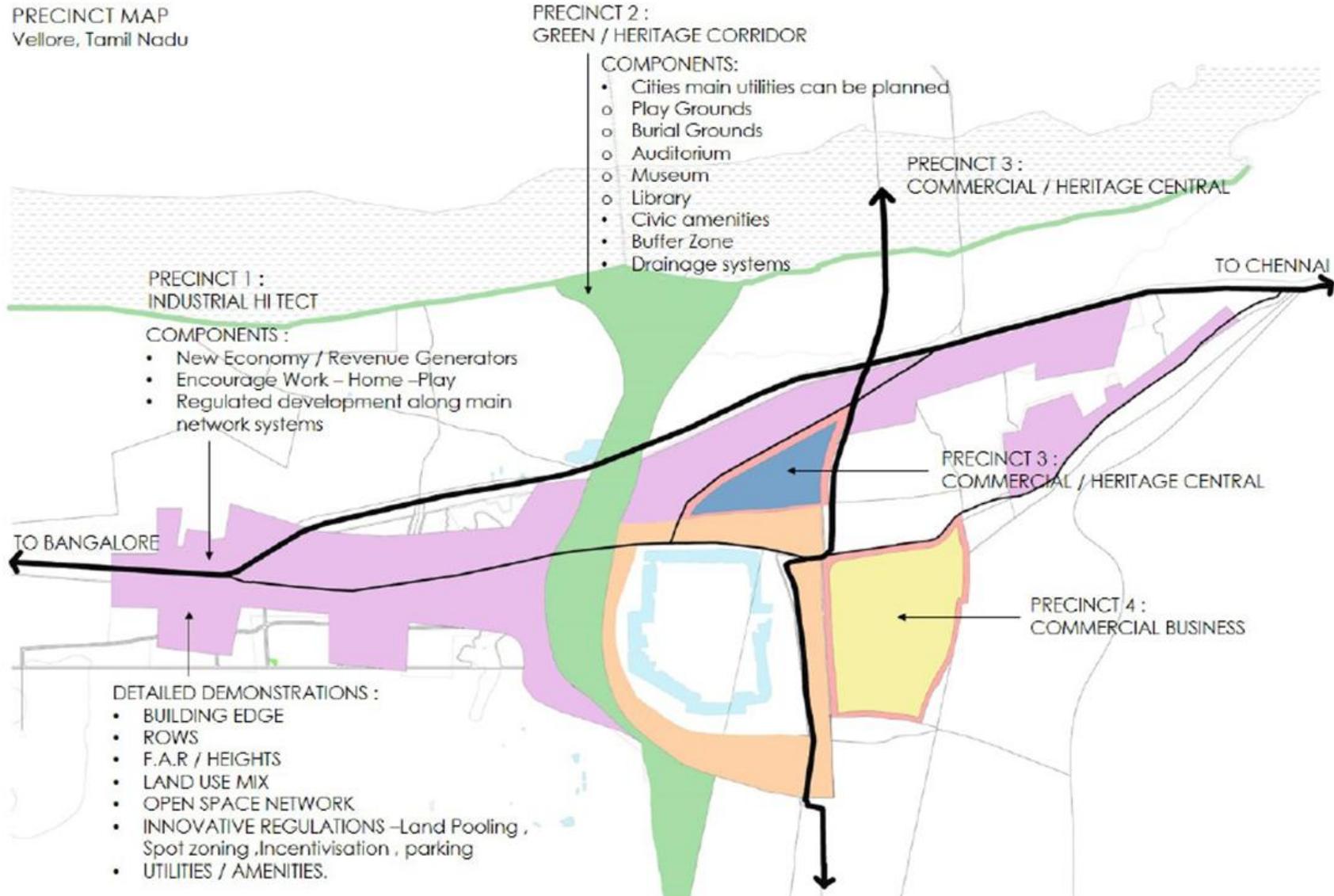
SERENA JOSEPHINE M.

COMMENT · PRINT · T · T

Vellore Smart City is on Facebook. To connect with Vellore Smart City, sign up for Facebook today.

Annexure 3.3.A

Precinct Map – Selected area and its surroundings



Annexure 3.3.B

Existing Structure Plan and Delineation

EXISTING STRUCTURE PLAN
Vellore, Tamil Nadu



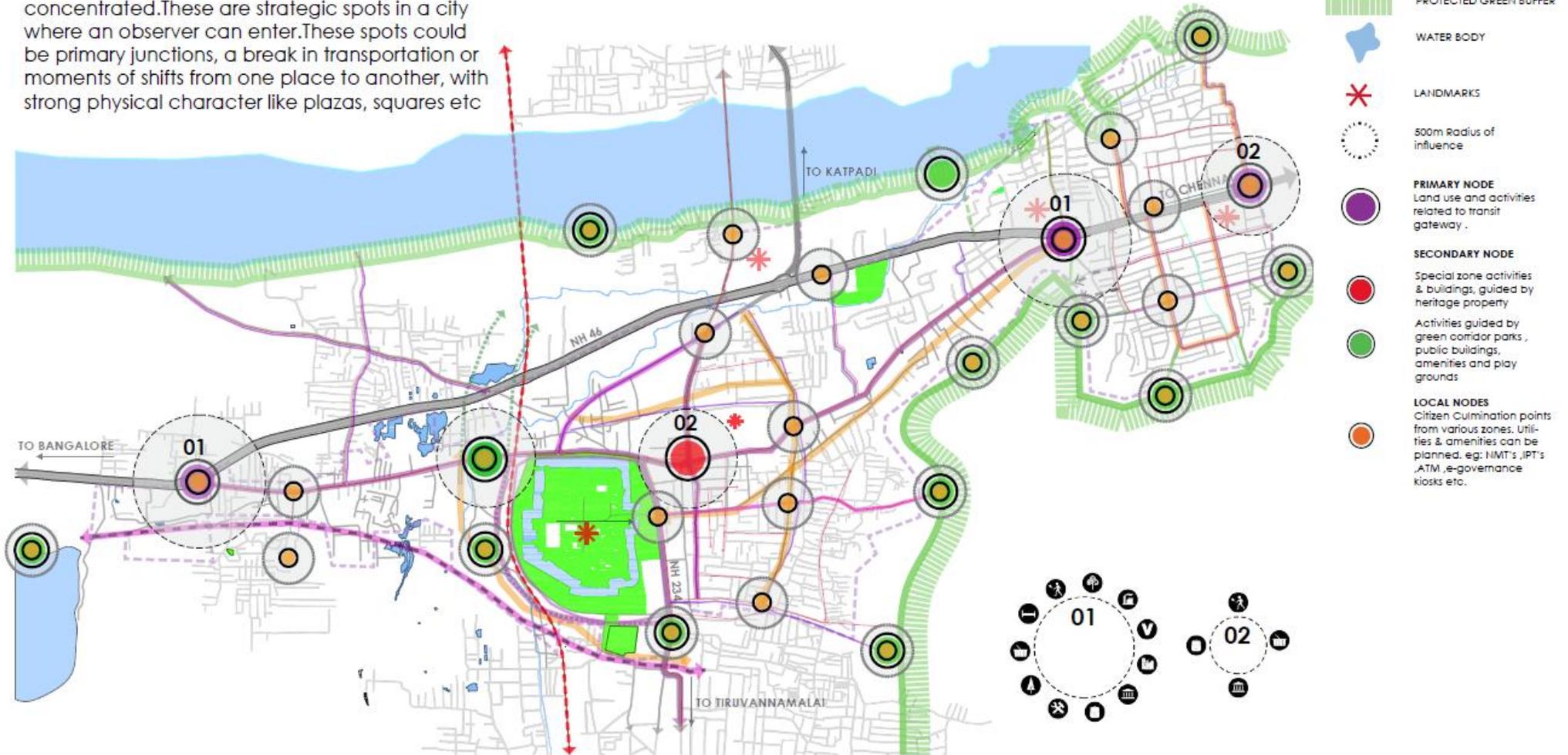
LEGEND

	NH EXPRESSWAY		RESIDENTIAL		AGRICULTURAL		GATEWAY
	NH ARTERIAL ROAD		COMMERCIAL		NEIGHBOURHOOD PARKS		DIRECTIONLESS NODE
	ARTERIAL CBD ROUTES		INDUSTRIAL		LAKE/POND		LANDMARKS
	RAILWAY LINE		MIXED USE		MAJOR NODE		TRANSITION/ BUSY CORRIDOR
	DELINEATION		EDUCATIONAL		INTERMEDIATE NODE/ HUB		MIXED USE CORRIDOR
	GREEN CORRIDOR		CHARACTERLESS, DISORGANISED LAND-USES, UNCLEAR BUILDING EDGES		LOCAL NODES		COMMERCIAL CORRIDOR
	DISCONTINUOUS GREEN CORRIDOR		NEGLECTED, REDUNDANT GREEN SPACE				VISUAL CORRIDORS
							DISCONTINUOUS/ ABRUPT/ DIRECTIONLESS NETWORK

Annexure 3.3.C

PROPOSED NODAL DEVELOPEMENT Vellore, Tamil Nadu

A node is a place where activities and routes are concentrated. These are strategic spots in a city where an observer can enter. These spots could be primary junctions, a break in transportation or moments of shifts from one place to another, with strong physical character like plazas, squares etc



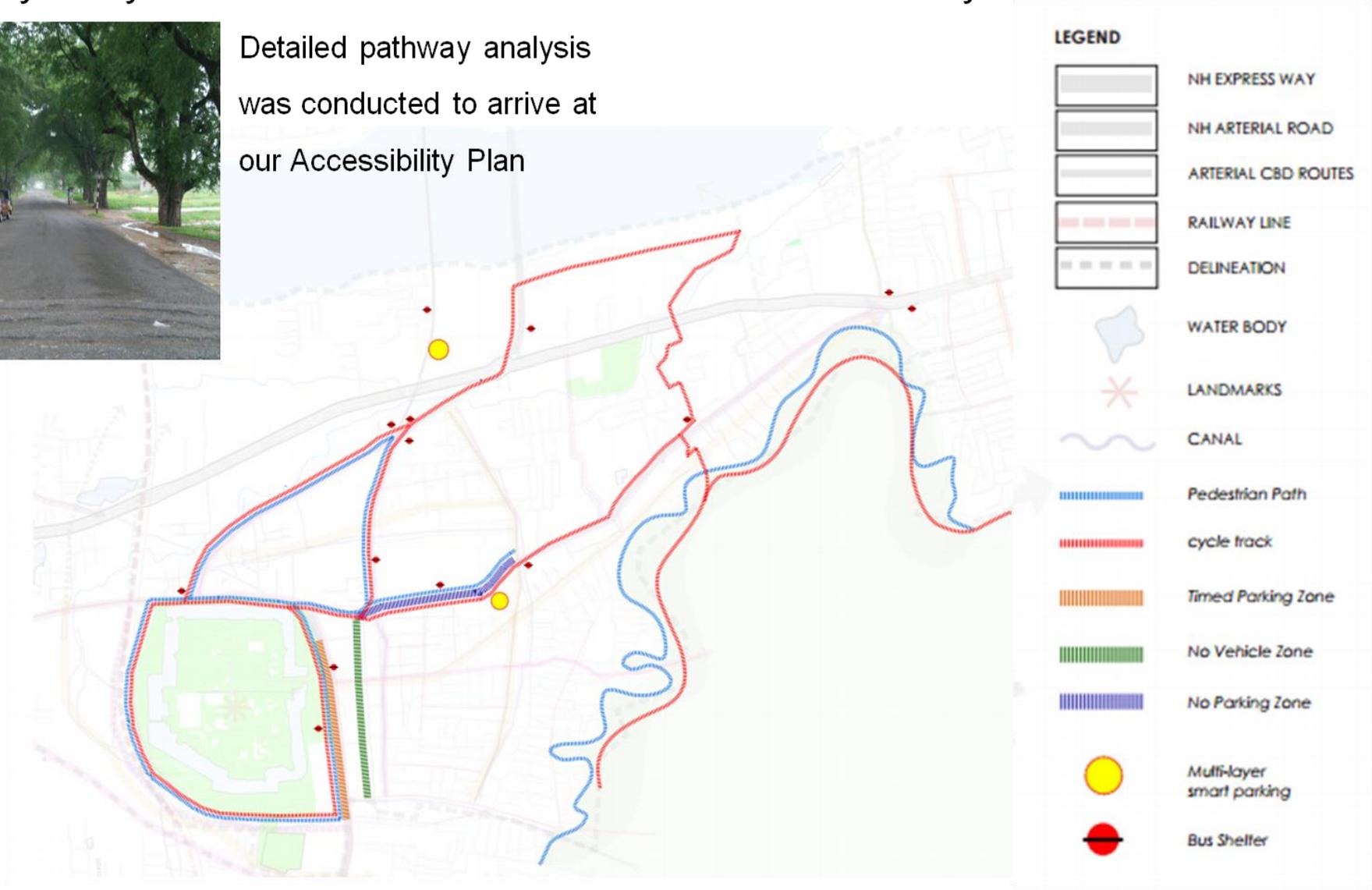
Annexure 3.3.D

Pathway Analysis



Detailed pathway analysis was conducted to arrive at our Accessibility Plan

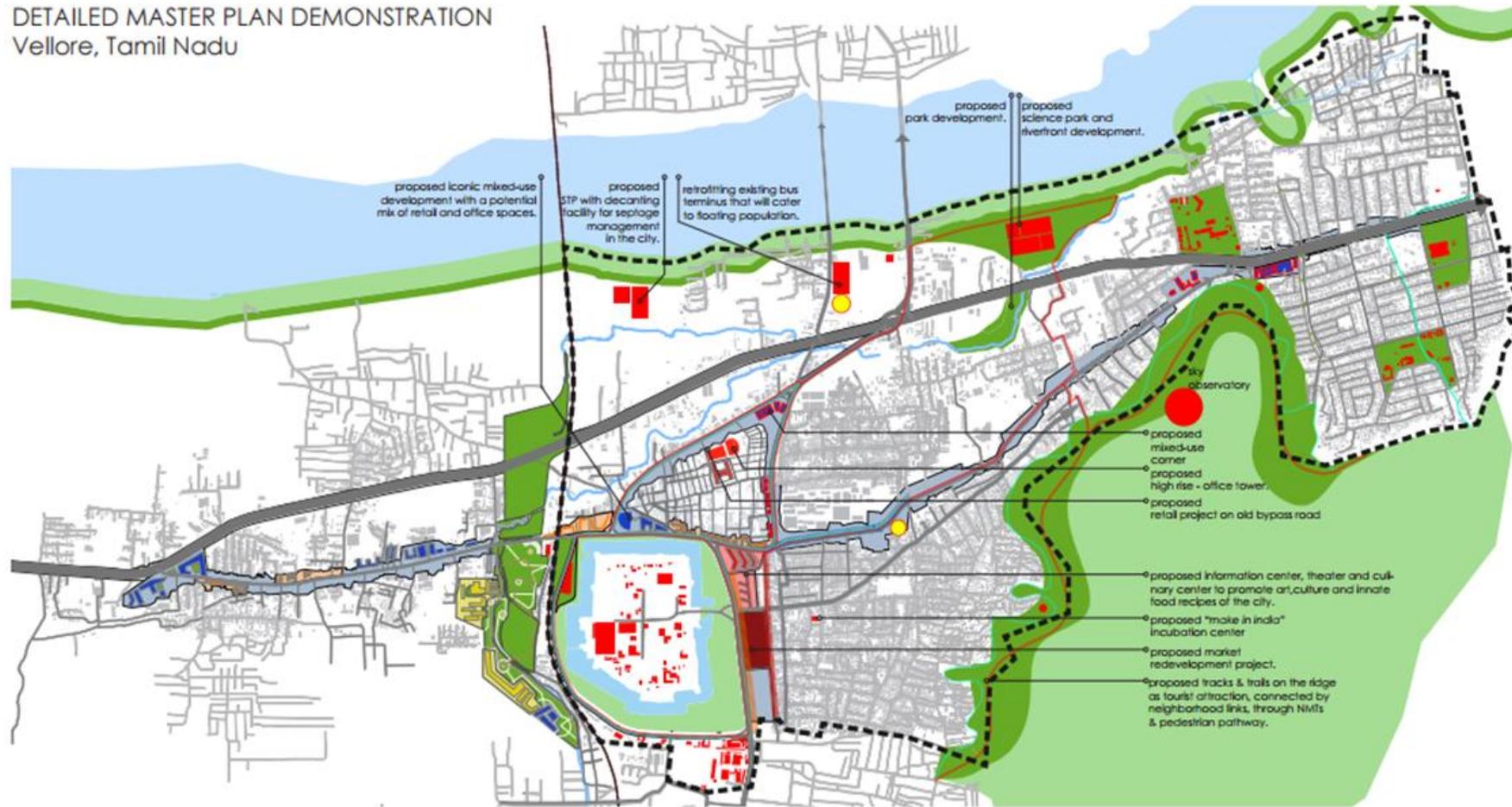
Accessibility Plan



Annexure 3.3.E

Detailed area based master plan

DETAILED MASTER PLAN DEMONSTRATION
Vellore, Tamil Nadu

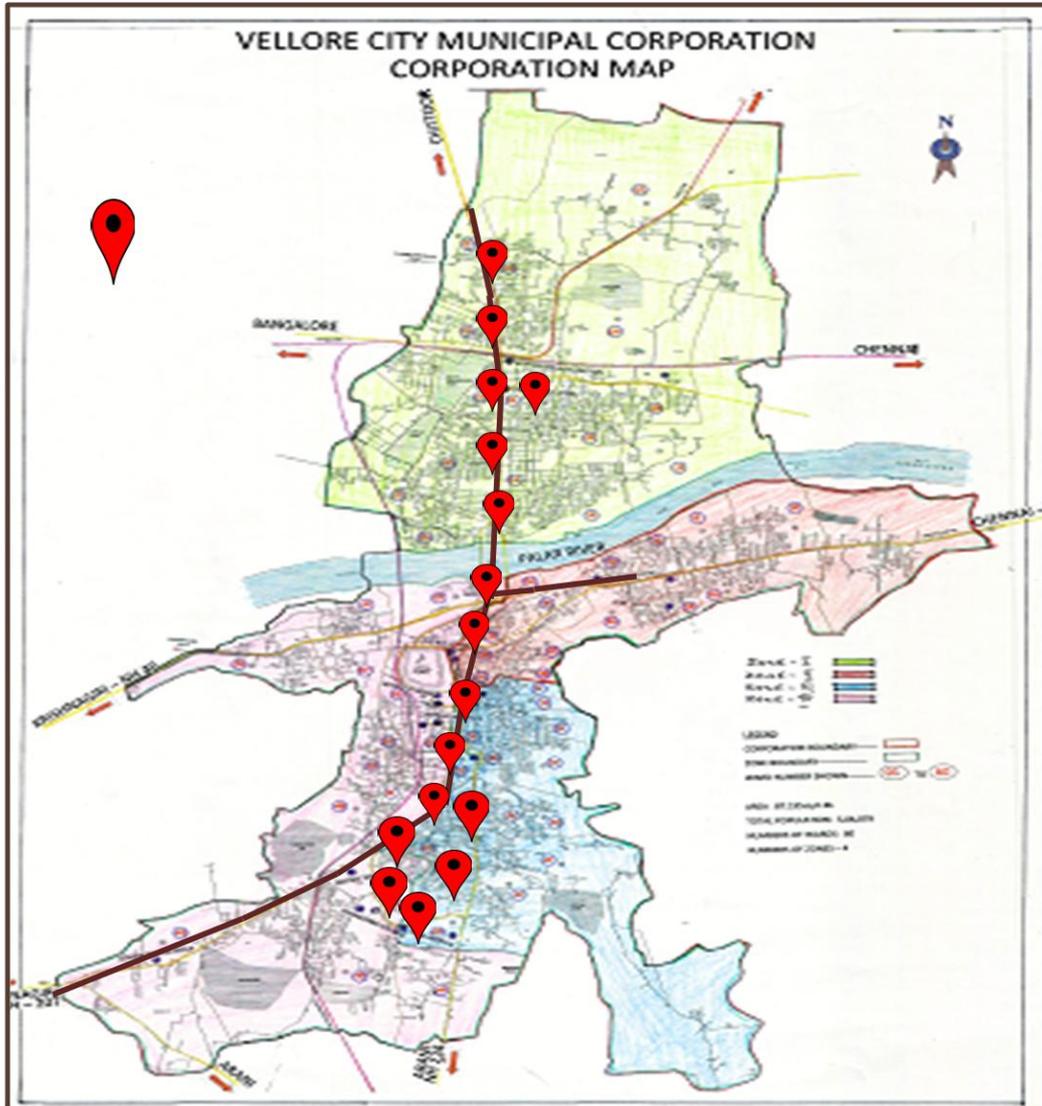


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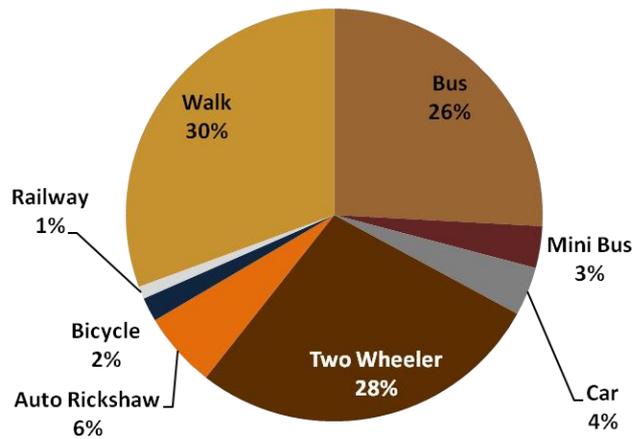
	NH EXPRESSWAY		PUBLIC		CYCLE PATH
	NH ARTERIAL ROAD		MIXED-USE		TIMED PARKING ZONE
	ARTERIAL CBD ROUTES		MARKET		NO VEHICLE ZONE
	RAILWAY LINE		NEIGHBORHOOD GREEN		NO PARKING ZONE
	DELINEATION		PROTECTIVE GREEN EDGE		MULTI LAYER SMART PARKING
	RESIDENTIAL		POND/RIVER		
	COMMERCIAL		PEDESTRIAN PATH		

Annexure 3.4.A

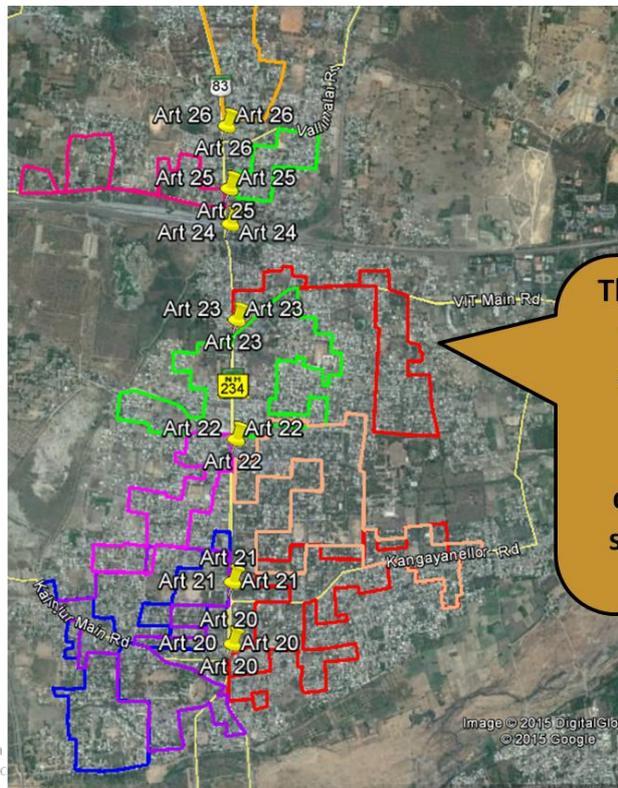
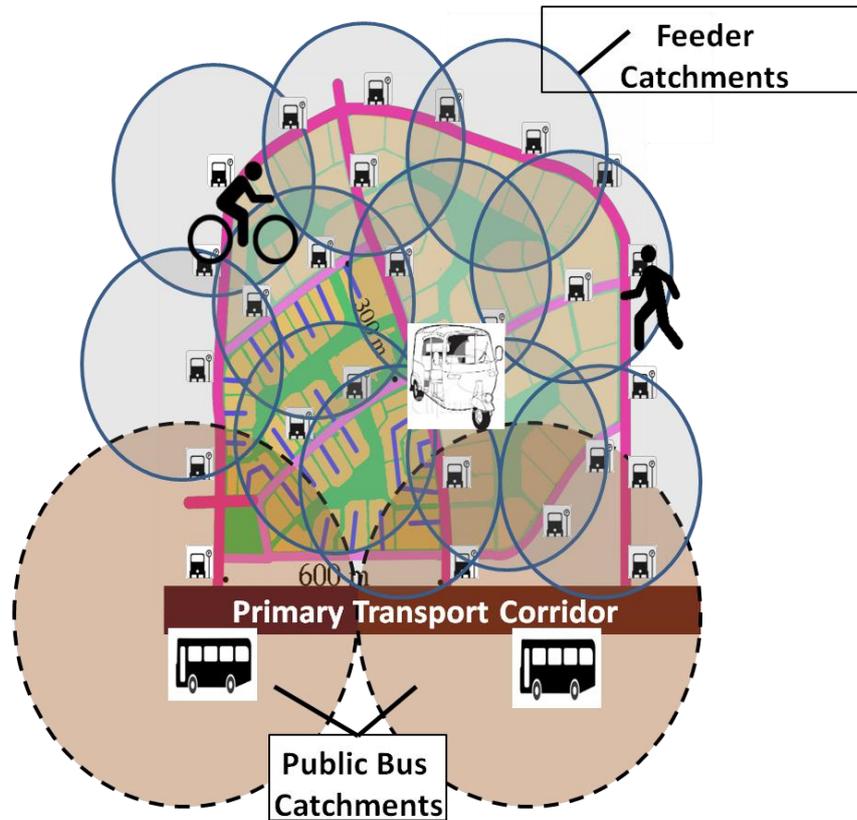
Congestion points and modes of transport share



Modal Share Based on Number of Trips

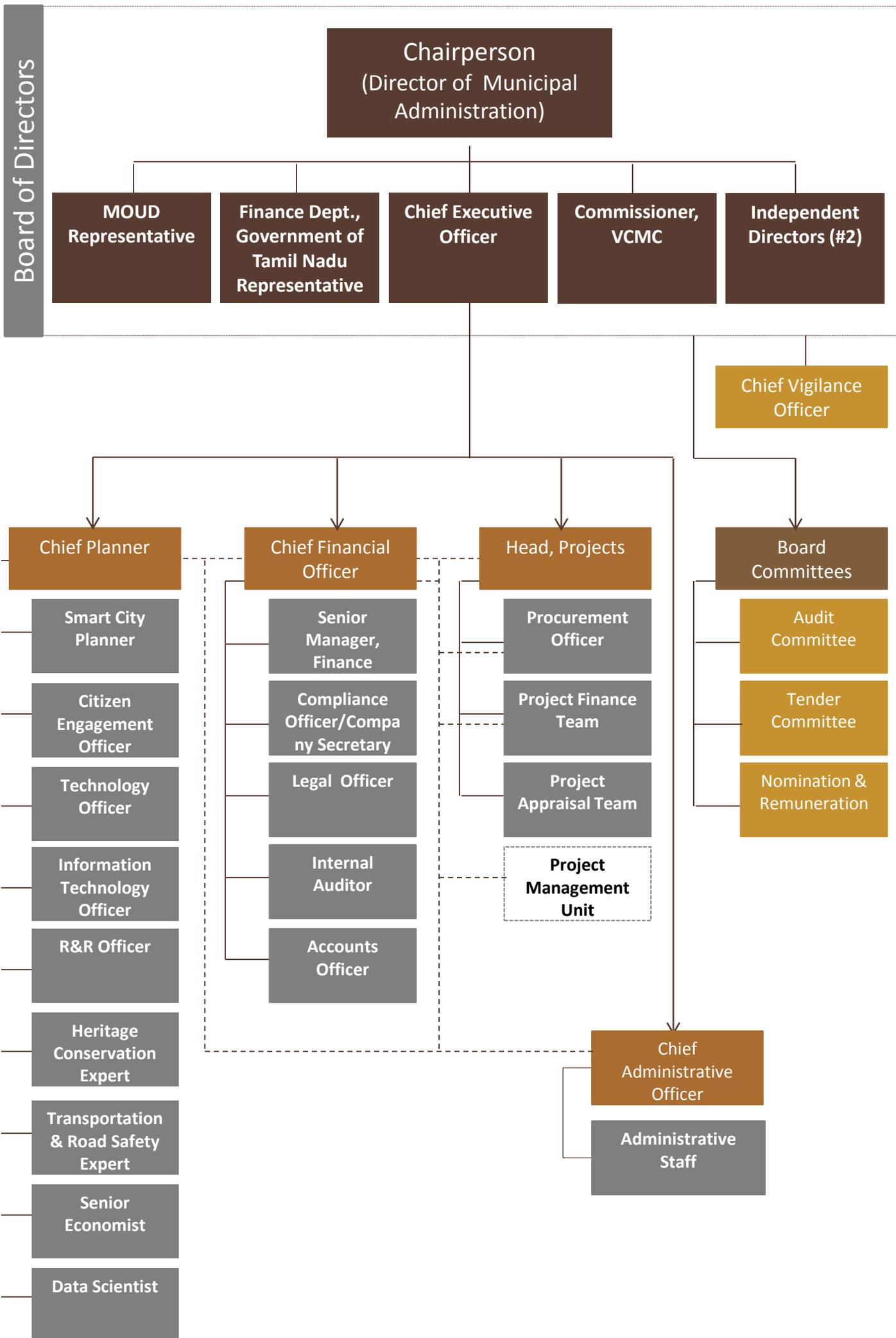


Feeder system analysis



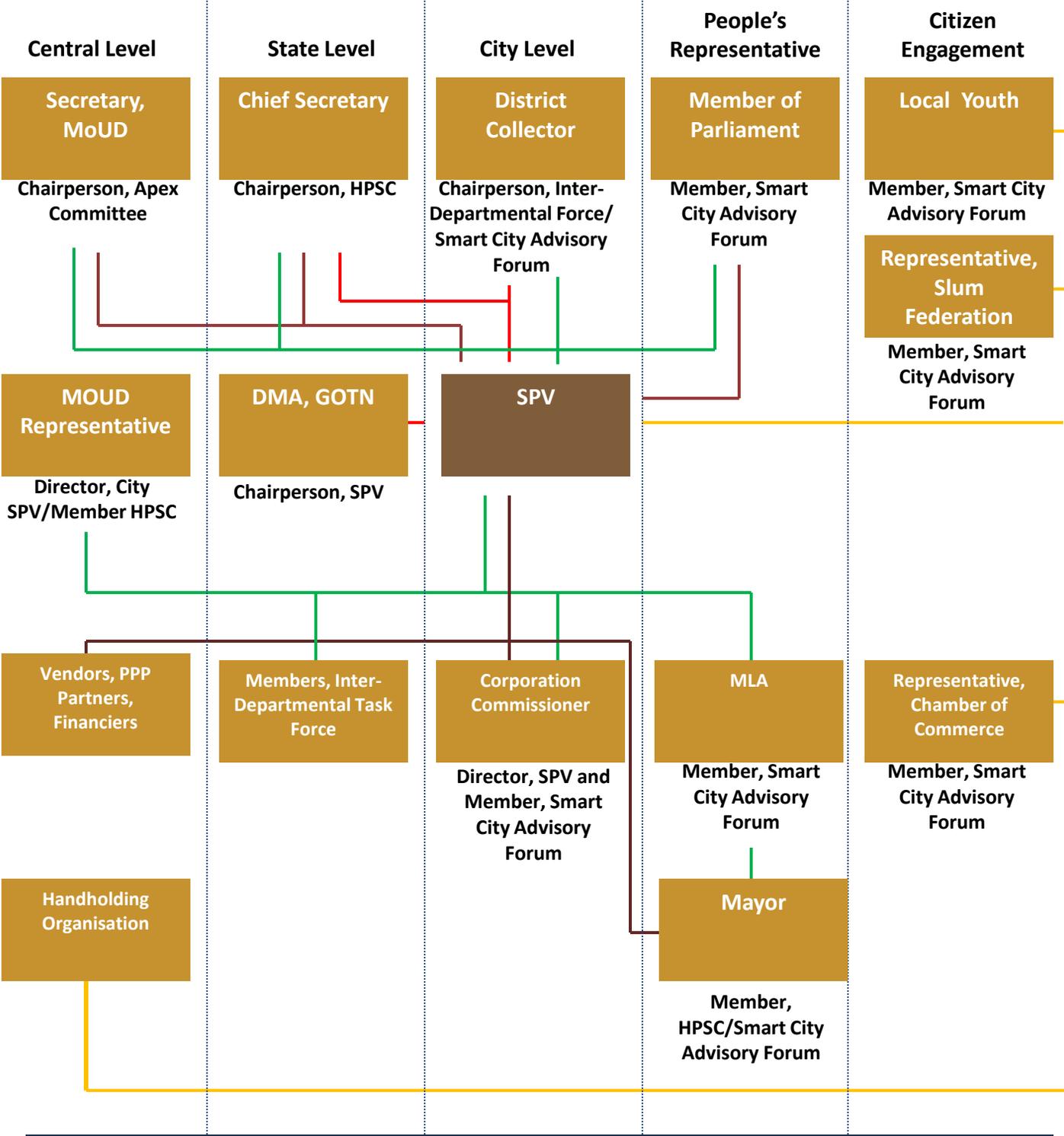
The roads of Vellore were thoroughly analyzed through field trips. This helped us in developing routes suitable for feeder systems

ANNEXURE 3.5 B



ANNEXURE 3.5.C

Stakeholder Organaogram



- Funding
- Facilitation
- Approvals
- Knowledge/Information/Consultation

9	Sensor Based Accident Prevention System	
9.1	Finalisation of Project Scope and Structure	
9.2	Selection of Implementation Agency (Partner)	
9.3	Financial Closure	
9.4	Construction/Procurement	
a	Procurement of sensors and alarm systems	
b	Capacity building activities across the proposed area	
9.5	CoD	
9.6	Operations & Maintenance	
9.7	Project Monitoring	
10	Express Emergency Response Systems	
10.1	Finalisation of Project Scope and Structure	
10.2	Selection of Implementation Agency (Partner)	
10.3	Financial Closure	
10.4	Construction/Procurement	
a	Development of the central infrastructure including emergency response mobile application	
b	Procurement of handheld mobile devices	
10.5	CoD	
10.6	Operations & Maintenance	
10.7	Project Monitoring	
11	Low cost overflow prediction of underground sewer lines	
11.1	Network analysis and identification of critical points in the proposed area	
11.2	Finalisation of Project Scope and Structure	
11.3	Selection of Implementation Agency (Partner)	
11.4	Financial Closure	
11.5	Construction/Procurement	
a	Procurement and installation of sensors	
b	CoD	
11.6	Operations & Maintenance	
11.7	Project Monitoring: Continuous monitoring and analysis of data	
12	Septage Management	
12.1	Finalisation of Project Scope and Structure	
12.2	Selection of Implementation Agency (Partner)	
12.3	Financial Closure	
12.4	Construction/Procurement	
a	Capacity building and empanelment of Masons/ Mason SHGs	
b	Preparation of Septage Management Database	
c	Construction of STP with Decanting Facility	
d	Procurement of Desludging Vehicles	
e	Procurement of Water Tankers	
f	Installation of ICT Systems	
12.5	CoD	
12.6	Operations & Maintenance	
12.7	Project Monitoring	
13	Water Supply & distribution Systems	
13.1	Finalisation of Project Scope and Structure	
13.2	Selection of Implementation Agency (Partner)	
13.3	Financial Closure	
13.4	Construction/Procurement	
a	Creation of Baseline for Mis-call based Messaging System	
b	Procurement and Installation of water quality monitoring system	
c	Procurement of Vehicle based data collection systems from Smart Meters	
d	Procurement and Installation of Smart Meters	
e	Establishment of Kiosks and putting in place system for online payment gateway for water tax payments	
13.5	CoD	
13.6	Operations & Maintenance	
13.7	Project Monitoring	
14	Strom Water Drains	
14.1	Finalisation of Project Scope and Structure	
14.2	Selection of Implementation Agency (Partner)	
14.3	Financial Closure	
14.4	Construction/Procurement	
a	100% completion of SWD Systems	
b	Procurement and installation of water levels in strom water drains	
c	Development of central infrastructure with decision support systems	
14.5	CoD	
14.6	Operations & Maintenance	
14.7	Project Monitoring	
15	Public Toilets	
15.1	Finalisation of Project Scope and Structure	
15.2	Selection of Implementation Agency (Partner)	
15.3	Financial Closure	
15.4	Construction/Procurement	
a	Development of e-toilets with ICT systems	
b	Retrofitting of Existing Toilets with ICT systems	
15.5	CoD	
15.6	Operations & Maintenance	
15.7	Project Monitoring	
16	Electricity & energy efficiency	
16.1	Finalisation of Project Scope and Structure	
16.2	Passing Council Resolution on City's Enregy Efficiency Policy	
16.3	Selection of Implementation Agency (Partner)	
16.4	Financial Closure	
16.5	Construction/Procurement	
a	Procurement and installation of smart electricity meters	
b	Procurement and laying under ground cabling	
c	Procurement and installation of kiosks and creation of online payment gateways	
16.6	CoD	
16.7	Operations & Maintenance	
16.8	Project Monitoring	
17	Street Lights	
17.1	Finalisation of Project Scope and Structure	
17.2	Selection of Implementation Agency (Partner)	
17.3	Financial Closure	
17.4	Construction/Procurement	
a	Installation of LED Street Lights	
b	Development of Web based monitoring system	
17.5	CoD	
17.6	Operations & Maintenance	
17.7	Project Monitoring	

18	Signage Boards	
18.1	Finalisation of Project Scope and Structure	
18.2	Selection of Implementation Agency (Partner)	
18.3	Financial Closure	
18.4	Construction/Procurement	
a	Erection of poles for signages	
b	Installation of locality maps in pedestrian friendly signage units	
c	Installation of road names and directional signages in every junction	
18.5	CoD	
18.6	Operations & Maintenance	
18.7	Project Monitoring	
19	SWM collection, recycling and recovery facilities	
19.1	Finalisation of Project Scope and Structure	
19.2	Selection of Implementation Agency (Partner)	
19.3	Financial Closure	
19.4	Construction/Procurement	
a	Procurement and installation of recycling and recovery system machinery	
19.5	CoD	
19.6	Operations & Maintenance	
19.7	Project Monitoring	
20	Tertiary treatment plant and recycled water distribution	
20.1	Finalisation of Project Scope and Structure	
20.2	Selection of Implementation Agency (Partner)	
20.3	Financial Closure	
20.4	Construction/Procurement	
a	Construction of tertiary treatment plants and dual plumbing pipelines for government buildings	
20.5	CoD	
20.6	Operations & Maintenance	
20.7	Project Monitoring	
21	Wi-Fi Zones	
21.1	Finalisation of Project Scope and Structure	
21.2	Selection of Implementation Agency (Partner)	
21.3	Financial Closure	
21.4	Construction/Procurement	
a	Development of high powered wi-fi towers across the proposed area	
21.5	CoD	
21.6	Operations & Maintenance	
21.7	Project Monitoring	
22	Pan City Initiative: Transportation	
22.1	Decongestion of traffic & Improvement in last mile connectivity in the city	
22.1.1	Finalisation of Project Scope and Structure	
22.1.2	Implementation of traffic inflow regulations to the city	
22.1.3	Implementation of real estate policy for Vellore Corporation	
22.1.4	Selection of Implementation Agency (Partner)	
22.1.5	Financial Closure	
22.1.6	Construction/Procurement	
22.1.7	Procurement of 120 new intra-city disabled friendly buses	
22.1.8	Procurement of 400 auto rickshaw feeder systems	
22.2	Intelligent Public Transport Systems & Traffic	
22.2.1	Procurement and Installation of GPS devices in buses and feeder systems	
22.2.2	Establish central infrastructure for real-time data collection	
22.2.3	Creation of online and mobile apps for vehicular tracking systems	
22.2.4	Procurement of display boards including 80 units for existing intra-city buses	
22.2.5	Establishing CCTV cameras in major junctions of the city and a central traffic modelling center	
22.3	Public Information Systems	
22.3.1	Procurement and installation of electronic display boards and kiosks	
22.3.2	Establishment of central infrastructure to enable two way communications	
22.3.3	Development of mobile apps for citizens and tourists	
22.4	CoD	
22.5	Operations & Maintenance	
22.6	Project Monitoring	
23	Pan City Initiative: Solid Waste Management	
23.1	ICT enabled Integrated Waste Management systems	
23.2	Finalisation of Project Scope and Structure	
23.3	Selection of Implementation Agency (Partner)	
23.4	Financial Closure	
23.5	Construction/Procurement	
a	Development of mobile apps and end-end solution for integrated waste management systems	
b	Establishment of central infrastructure for data collection systems	
c	Procurement of GIS enabled refuse collection vehicle with mounted Mobile devices	
d	Handheld mobile devices for M&E cell in every decentralized waste collection centres & Ward-wise nodal officers	
23.6	CoD	
23.7	Operations & Maintenance	
23.8	Project Monitoring	
24	Setting up of a Research and Monitoring Facility and providing advisory support to Smart City SPV through Big Data	
24.1	Finalisation of Project Scope and Structure	
24.2	Selection of Implementation Agency (Partner)	
24.3	Financial Closure	
24.4	Construction/Procurement	
a	Setting up of research and monitoring cell in VIT university	
24.5	CoD	
24.6	Operations & Maintenance	
24.7	Project Monitoring	

Annexure 3.7: Financials

S.No	Categories	Sectors	Detailed Components	Capital Cost	O&M (20 Yrs)	Funding Source		
						Smart Cities	Other Grants	PPP / CSR
Area Based Development - Projects								
1	Water Supply & Storm Water Drain	Water Supply	Smart Meters	15.43	0.00	15.43		
			Vehicle based data collection system	0.50	2.76	0.50		
			Kiosks in Corporation & Zonal office - for payment	0.40	0.74	0.40		
			Real-time Water Quality Monitoring	2.50	9.20	2.50		
			SCADA based water resources management solution	8.90	16.37	8.90		
			Missed call based water supply distribution timing identification systems	0.11	0.00	0.11		
			Rehabilitation of Transmission & Distribution Network (12Km of Transmission network and 80 Km of distribution network)	23.47	25.90	23.47		
			Improvement in Water Supply distribution systems	50.00	0.00		50.00	
			Water Augmentation	38.51	0.00		38.51	
		SWD	Closure of open SWD in the City	18.00	19.86	18.00		
RCC lining work for carrying water through channel to palar river	62.50		68.97	62.50				
ICT to analyze water flow levels in SWD and DSS for otteri reservoir on water discharge	0.60		0.66	0.60				
2	Improved Sanitation Services	Solid Waste Management	Road cleaning machines	2.50	4.60	2.50		
			MRF (100 Ton/Day capacity to meet city needs)	78.31	144.03	78.31		
			Pyrolysis Plant (48 Ton/Day capacity to meet city needs)	4.00	7.36	4.00		
			Decentralized Waste Management	20.72	0.00		20.72	
		Sewerage & Treatment	ICT for detection of early signs of sewer system overflows	0.48	1.77	0.48		
			Tertiary treatment plant for wastewater (7.71 MLD) including UGSR (2.6 MLD)	21.58	23.81	21.58		
			Dual plumbing system for distribution of recycled wastewater in the city	5.20	2.87	5.20		
		Septage Management	Purchase of vehicles	1.26	2.32	1.26		
			Decanting Facility in STP/Pumping stations	0.40	0.44	0.40		
			Creation of Database for septage management	0.21	0.00	0.21		
			Pipeline to discharge recycled wastewater at velavadi Eri / Firestation recharge points	4.00	4.41	4.00		
		Public Toilets	Construction of smart public toilet units in bus stops	1.00	3.68	1.00		
			Retrofitting/Upgrading existing public toilets	0.63	2.30	0.63		
ICT for reporting cleanliness of public toilets	0.11		0.12	0.11				

S.No	Categories	Sectors	Detailed Components	Capital Cost	O&M (20 Yrs)	Funding Source		
						Smart Cities	Other Grants	PPP / CSR
		Public Toilets	Mobile Truck based toilets for tourists in key location of the city	5.00	27.59	5.00		
			ICT for monitoring waterlevel in toilets + auto alert system for water refiling	1.40	1.54	1.40		
			Community Toilets	1.33	0.00		1.33	
3	Electricity, Street Lights and Improved Distribution Systems Design	Electricity	Smart Meters	12.34	0.00	12.34		
			Kiosks in EB office - for ease of payment	0.10	0.18	0.10		
			Solar Roof Top	112.50	206.92	112.50		
			Underground cabling	28.00	30.90	28.00		
		Street lights	New Street lights poles in parks, hill ridge and hiking trails	1.05	1.93	1.05		
			Solar Street lights	1.05	1.93	1.05		
			Web based switch - ON & Off + Current flow based operational status monitoring systems for street lights	3.08	3.40	3.08		
			LED Street lights with O&M	0.68	0.00		0.68	
		Ducting	Ducting for cables and pipelines	16.00	17.66	16.00		
		4	Improved Mobility Services	Signage Boards	Physical signage board in every junction to promote ease of transportation in the city (Above the ground)	0.28	0.31	0.28
Neighbourhood / locality map with important landmarks in every junction - to encourage pedestrians (on the ground)	0.60				0.66	0.60		
Tourism Development	2.50				0.00		2.50	
Motorized & Non-Motorized Transportation Improvement Plans	Pavement and Cycling Tracks			2.80	3.09	2.80		
	Roads			12.00	13.24	12.00		
	Pavement			12.48	13.77	12.48		
	Construction of Flyovers			110.00	0.00		110.00	
	Benches in parks, hill ridge and key areas			3.00	5.52	3.00		
	Automatic packaged ISO certified water packet dispensary outlets			1.25	2.30	1.25		
	2 Stairs to Highway bridge from City shoulder road - Scenic View of the Entire City			0.70	1.29	0.70		
	Development of Palar Riverfront road amenable for pedestrians & Bycling			1.35	1.49	1.35		
	Construction of exclusive walking & Bycling trail in the hill ridge			1.80	1.99	1.80		
	Development of hiking trail path to Sky Observatory			0.80	0.88	0.80		
	Creation of bi-cycle parking slot in Fort			0.30	1.10	0.30		
	Procurement of Bycycles			2.00	3.68	2.00		

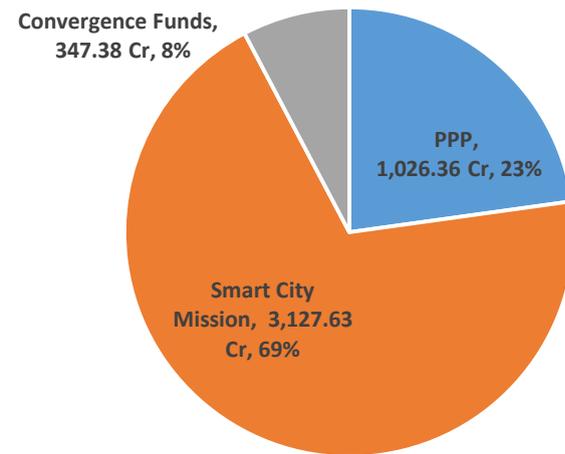
S.No	Categories	Sectors	Detailed Components	Capital Cost	O&M (20 Yrs)	Funding Source			
						Smart Cities	Other Grants	PPP / CSR	
5	Recreation and Improved Public Spaces	Parking, Bus Stand & Market redevelopment	Creation of multi-layer smart parking near CMC hospital	39.02	172.25	39.02			
			Creation of multi-layer smart parking near New Bus Stand - Including direct connection to New Bus Stand	19.51	86.13	19.51			
			Hi-tech Bus Terminus Development	56.92	167.51	56.92			
			Structured Parking in Market Area opposite to fort - timed parking	0.30	1.32	0.30			
			Modern bus stops & Auto Stands in the area	2.80	3.09	2.80			
			Centers of immersive learning	15.00	66.21	15.00			
		Recreation	Cultural Center - Theatre hall, Culinary Center & Parking lot	10.50	19.31	10.50			
			Construction of 1000 Seat Capacity Theatre hall to promote City/state's innate culture & identity.	2.00	11.04	2.00			
			Fort view Culnary Centre	0.30	0.55	0.30			
			Establishment of Sky Obervatory Center in Sathuvachari Hills by setting up a large space telescope, multi-purpose open amphitheatre & space lab.	3.80	20.97	3.80			
			Creation of Audio-visual content for Vellore Fort & City heritage	3.00	0.00	3.00			
			Handheld devices in Fort for viewing audio-visual contents	1.00	1.84	1.00			
			Park Improvement	1.26	0.00		1.26		
			Mapping City's heritage by archeological experts and creation of self-guided heritage trail content for Vellore City	1.00	0.00	1.00			
			Fort Development	Moat desilting	48.62	0.00	48.62		
				Floodlight Systems for Vellore Fort	0.40	0.00	0.40		
		Boating in fort moat		0.90	0.00	0.90			
		City Aesthetics	City Aesthetics - 3D wall paintings	2.34	4.30	2.34			
			Urban Forestry and Landscaping	3.00	5.52	3.00			
		Market Development	Netaji market development plan	34.00	150.09	34.00			
Enablers for Intelligent Solutions	ICT Solutions	Handheld device to all emergency reponse units	2.00	0.00	2.00				
		Surviellance camera in all important nodes of the City, commercial area, market areas in the city	3.00	5.52	3.00				
		ICT device for automatic facial recognition from Criminal database and behavioral monitoring in important areas of the city	2.00	0.00	2.00				
		Sensor based accident prevention system & solar based emergency lighting system during blackouts	5.55	10.21	5.55				
		WB - Model City	120.00	0.00		120.00			
		Connectivity	Construction of wi-fi zones for 10 KM	5.00	9.20	5.00			
	Hardware (80TB Server)		9.11	0.00	9.11				

S.No	Categories	Sectors	Detailed Components	Capital Cost	O&M (20 Yrs)	Funding Source		
						Smart Cities	Other Grants	PPP / CSR
	Enablers for Intelligent Solutions	Central Control Centre for data collection, storage, analysis & integrated dashboards	GIS & other licenses	8.55	0.00	8.55		
			Cloud	3.86	0.00	3.86		
			network cost	7.14	0.00	7.14		
			a. Command and control centre - physical building with room for individual departments b. Video Wall - Operations room with alerting and monitoring systems c. Operator Work Stations d. Data Centre and conference facilities	40.00	0.00	40.00		
			Web & mobile application for citizens and 3rd Party E-Gov applications for line departments	6.00	0.00	6.00		
7	Improved Housing Services	Urban Housing	NUHM Scheme	1.11	0.00		1.11	
			Housing & Slum Development Programme	1.27	0.00		1.27	
Sub - Total I (ABD Cost)				1155.95	1418.59	808.57	347.38	0.00
VELLORE SMART CITY PROPOSAL - PAN CITY								
1	Intelligent Transportation Systems	Last Mile Connectivity	Improve intra-city bus network	36.00	0.00			36.00
			Feeder	18.00	0.00			18.00
			Bus Shelter incl. land acquisition cost	7.00	0.00			7.00
		Intelligent Public Transport Systems	GPS devices	0.20	0.00	0.20		
			Display boards for vehicle interior - to display next coming bus stop in multi languages	0.10	0.00	0.10		
			Display boards for bus stops with data receiving capabilities – to display next coming bus	0.14	0.00	0.14		
			Solar Panel for busstop display boards	0.42	0.00	0.42		
		Real-time Traffic Modelling	Electronic Ticketing system	0.20	0.00	0.20		
			CCTV cameras for traffic modeling including name plate recognition	0.05	0.09	0.05		
			Public Information Systems	Electronic display boards in public areas allowing bi-directional information flow (Kiosks) including grievance registration systems	0.72	1.32	0.72	
Electronic Display boards in bus - advertisements & general information systems	0.60	1.10		0.60				
2	Decentralized Solid Waste Management Framework	SWM	Dustbin cost for households, commercial establishments, market, educational institutions	27.25	0.00			27.25
			GIS enabled refuse collection vehicles	33.11	0.00			33.11
			Handheld devices for household Refuse Collectors (RC), Market waste RC, Barber RC, On Demand RC, M&E team in Decentralized waste collection centers, nodal officers, commissioner, mayor and the collector	0.579	1.06	0.58		

S.No	Categories	Sectors	Detailed Components	Capital Cost	O&M (20 Yrs)	Funding Source		
						Smart Cities	Other Grants	PPP / CSR
			Integrated waste management monitoring framework	0.8	0.00	0.80		
Sub-Total II (Pan-City Cost)				125.17	3.58	3.81	0.00	121.36
Sub-Total III (ABD Cost + Pan-City Cost)				1281.12	1422.17	812.38	347.38	121.36
Contingency and Escalation - 10% of project cost				93.37		81.24		12.14
Project Management Cost @ 5% of SCM Financing				40.62		40.62		
Total Portfolio				1415.11	1422.17	934.23	347.38	133.50

Project Financing	Amount	ABD		Pan City	
		Lifetime Capex (20 Yrs)	Lifetime Opex (20 Yrs)	Lifetime Capex (20 Yrs)	Lifetime Opex (20 Yrs)
PPP	1,026.36	-	-	424.43	601.93
Smart City Mission	3,127.63	1,682.09	1418.59	23.37	3.58
Convergence Funds	347.38	347.38	-	-	-
Total Project Portfolio	4,501.37	2,029.47	1,418.59	447.80	605.51

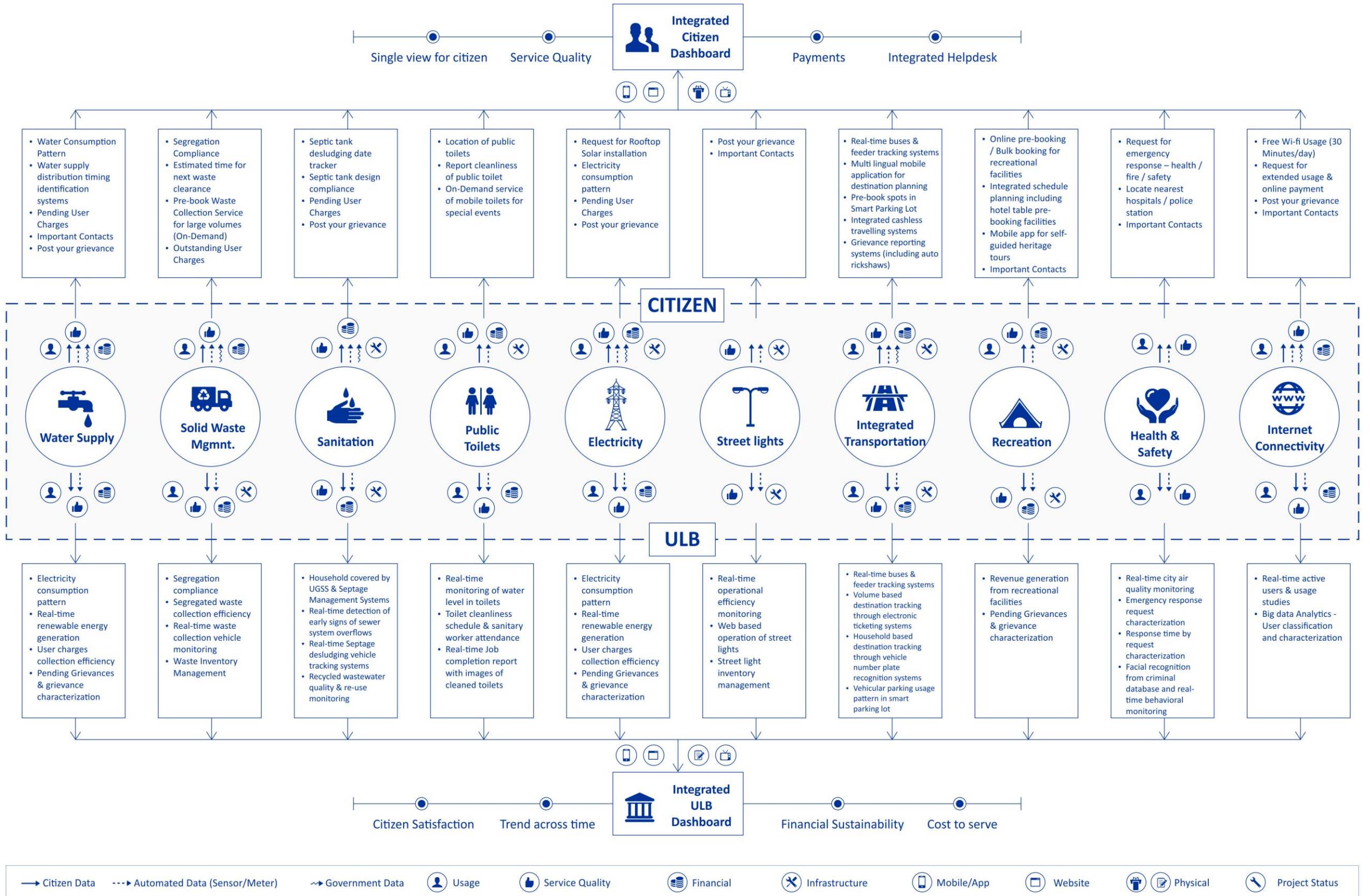
Total Smart City Portfolio = 4501.37 Cr



SPV financials (all values in INR Lakhs)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
Cash Inflows	38800	51713	4691	4355	3666	4182	3447	3950	4563	5255	8392	4945	5774	6654	7708	8896	8027	9355	10854	12544
<i>Capital from ULB</i>	0	0	0	0	0	0	0	0	0	0	1204	0	0	0	0	0	0	0	0	0
<i>Capital from CG (as ULB capital)</i>	19400	25249.78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Capital from SG</i>	19400	25249.78	0	0	0	0	0	0	0	0	1204	0	0	0	0	0	0	0	0	0
<i>Bridge Loan</i>	0																			
<i>Principal repayment from projects</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Interest payment from projects</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Net cash from projects</i>	0	1256	3077	3614	2636	2880	3149	3444	3768	4125	4516	4945	5416	5931	6496	7115	7792	8532	9342	10227
<i>Interest on net balance</i>		-42	1614	740	1030	1301	298	506	795	1130	1469	0	358	723	1212	1781	235	823	1512	2316
<i>Carried Forward</i>		-529	20169	9255	12874	16268	3730	6327	9934	14127	18365	0	4479	9035	15145	22265	2944	10286	18901	28955
Cash outflows	39329	31014	15605	736	272	16720	851	343	370	1017	26757	466	1218	544	587	28217	685	740	799	863
<i>Debt to projects</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Grants to projects</i>	29889	23465	11712	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Equity to projects</i>	7377	5866	2928	461	0	16426	533	0	0	617	26325	0	715	0	0	27583	0	0	0	0
<i>Bridge loan repayment</i>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Project Preparation, PMC, M&E</i>	1863	1467	732	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>SPV Operating Expenses</i>	200	216	233	252	272	294	317	343	370	400	432	466	504	544	587	634	685	740	799	863
Net cash flows	-529	20699	-10914	3619	3394	-12538	2596	3607	4193	4238	-18365	4479	4556	6110	7120	-19321	7342	8615	10055	11680
Net balance	-529	20169	9255	12874	16268	3730	6327	9934	14127	18365	0	4479	9035	15145	22265	2944	10286	18901	28955	40636

ANNEXURE 3.8

Datascience to Promote Participatory Governance



ANNEXURE 4

(Supporting documents, such as government orders, council resolutions, response to Question 33 may be annexed here)

S. No	Particulars	✓
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ANNEXURE 4.1

Most Immediate



Municipal Administration
and Water Supply (MAII)
Department, Secretariat,
Chennai- 600 009.

Letter No.29870/MA.II/2015 - 4, dated 23.12.2015

From

Thiru.K.Phanindra Reddy, I.A.S.,
Principal Secretary to Government

To

The Mission Director, Smart Cities Mission/
Additional Secretary to Government of India,
Ministry of Urban Development,
New Delhi - 110 011.

Sir,

Sub: Smart Cities Mission - Smart City
Proposals of the 12 Cities of Tamil Nadu -
Forwarded - Reg.

I am directed to inform that, the second meeting of the State Level High Powered Steering Committee of the Smart Cities Mission of the State of Tamil Nadu under the Chairmanship of the Chief Secretary to Government, held on 21.12.2015 reviewed the Smart City Proposals of the Mission Cities of the State, viz., 12 City Municipal Corporations and resolved to forward the said proposals for participation in the Stage II National level Challenge. Accordingly, the proposals are forwarded.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'S.L. J. J. J.', with the date '23/12/15' written below it.

for Principal Secretary to Government

Copy to

The Chairperson and Managing Director,
Tamil Nadu Urban Finance and Infrastructure
Development Corporation Limited, Chennai-35.

Annexure 4.2



Municipal Administration
and Water Supply (MAI)
Department, Secretariat,
Chennai- 600 009.

MINUTES OF THE SECOND STATE LEVEL HIGH POWERED STEERING COMMITTEE MEETING HELD ON 21.12.2015 AT 5.30 P.M FOR SMART CITY MISSION

The Second meeting of the **State Level High Powered Steering Committee for Smart City Mission** was held in the Chief Secretary Conference Hall, Secretariat on 21.12.2015 at 5.30 P.M under the Chairmanship of **Thiru K. Gnanadesikan, I.A.S.**, Chief Secretary to Government.

The following members attended the meeting:

- | | |
|--|------------------|
| 1. Thiru K Shanmugam IAS.
Principal Secretary to Govt,
Finance Department, Secretariat
Chennai-600 009 | Member |
| 2. Thiru K.Phanindra Reddy IAS.
Principal Secretary to Government.
Municipal Administration and
Water Supply Department
Secretariat, Chennai-600 009 | Member |
| 3. Thiru S.Krishnan IAS.
Principal Secretary to Government.
Planning, Development and
Special Initiatives Department,
Secretariat, Chennai-600 009 | Member |
| 4. Thiru.Vikram Kapoor, I.A.S.
Principal Secretary/Commissioner,
Corporation of Chennai,
Chennai-600 003. | Member |
| 5. Dr. S. Swama, I.A.S.
Chairperson and Managing Director,
TUFIDCO, Nandanam,
Chennai - 600 035. | Member-Secretary |

- | | |
|--|--------|
| 6. Dr.B.Chandra Mohan, I.A.S.,
Managing Director,
Chennai Metropolitan Water Supply
and Sewerage Board,
Chennai- 600 002 | Member |
| 7. Thiru. Vijayaraj Kumar, I.A.S.
Managing Director,
TamilNadu Water supply & Drainage Board,
Chepauk,
Chennai-600 009. | Member |
| 8. Thiru G. Prakash, I.A.S.
Director of Municipal Admin.
Chepauk,
Chennai-600 005. | Member |
| 9. Tmt. Kakarla Usha, I.A.S.
Managing Director,
TNUIFSL,
Chennai. | Mentor |
| 10.Thiru M. Kathiravan, I.A.S
Commissioner,
Madurai Corporation | Member |
| 11.Dr.Vijaya Karthikeyan, I.A.S
Commissioner,
Coimbatore Corporation | Member |
| 12.Tmt M.Vijayalakshmi
Commissioner,
Trichy Corporation | Member |
| 13.Thiru N.Manohar
Commissioner,
Dindugul Corporation | Member |
| 14.Thiru P.Kumar
Commissioner,
Thanjavur Corporation | Member |
| 15.Thiru S.Sivasubramanian
Commissioner,
Tirunelveli Corporation | Member |

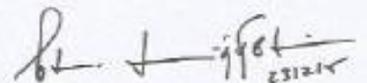
- | | |
|---|---|
| 16.Thiru K.R.Selvaraj
Commissioner,
Salem Corporation | Member |
| 17.Thiru R.Mohan
Commissioner,
Erode Corporation | Member |
| 18.Tmt P.Janaki Ravindran
Commissioner,
Vellore Corporation | Member |
| 19.Thiru A.Laxmanan
City Engineer,
Thoothukudi Corporation | Representing
Thoothukudi Corporation |
| 20.Thiru M.V.D.Tamilselvan
Executive Engineer,
Tiruppur Corporation | Representing
Tiruppur Corporation |

The Chairperson and Managing Director, TUFIDCO elaborated the process adopted such as Citizen Engagement, Impact on the population, the rationale behind selection for Area based Development and PAN city Development Strategy by the Corporations for finalizing the 12 Smart Cities proposals before the Committee.

The Committee reviewed the Proposals presented by the 12 Corporations and deliberated in detail. The Committee accepted the rationale behind the strategy adopted by all the 12 Cities. The committee also directed that the technological options presented would have to be evaluated in detail for their technical feasibility and financial sustainability during projectisation stage. On discussion, the committee directed that the proposals be forwarded to Ministry of Urban Development, Government of India on-time.

K.GNANADESIKAN
CHIEF SECRETARY & CHAIRMAN OF HPSC

//True Copy//


23/12/14
Section Officer

**MINUTES OF THE THIRD STATE LEVEL HIGH POWERED
STEERING COMMITTEE MEETING HELD ON 23.06.2016 AT 5.30 P.M
FOR SMART CITY MISSION**

The third meeting of the **State Level High Powered Steering Committee** for **Smart City Mission** was held in the Chief Secretary conference hall, Secretariat on **23.06.2016 AT 5.30 P.M** under the Chairmanship of **Dr.P.Rama Mohana Rao, I.A.S.,** Chief Secretary to Government .

The following members attended the meeting:

1	Thiru K.Shanmugam, I.A.S., Addl Chief Secretary to Government, Finance Department, Secretariat, Chennai-600 009	Member
2	Thiru K. Phanindra Reddy, I.A.S., Principal Secretary to Government Municipal Administration and Water Supply Department Secretariat, Chennai - 600009.	Member
3	Thiru S.Krishnan, I.A.S., Principal Secretary to Government, Planning Development and Special Initiatives Department, Secretariat, Chennai-600 009	Member
4	Thiru.Vikram Kapoor, I.A.S. Principal Secretary/Managing Director, Chennai Metropolitan Water Supply and Sewerage Board, Chennai- 600 002.	Member
5	Dr. S. Swarna, I.A.S. Chairperson and Managing Director, TUFIDCO, Nandanam, Chennai – 600 035.	Member-Secretary
6	Thiru. Vijayaraj Kumar, I.A.S. Managing Director, TamilNadu Water supply & Drainage Board, Chepauk, Chennai-600 009.	Member
7	Thiru.Sandeep Nanduri, I.A.S., Commissioner, Madurai Corporation	Member

8	Tmt. N.S.Prema, Commissioner, Trichy Corporation	Member
9	Thiru N.Manohar, Commissioner, Dindigul Corporation	Member
10	Thiru. M.Varadaraj, Commissioner, Thanjavur Corporation	Member
11	Thiru. Sivasubramaniam, Commissioner, Tirunelveli Corporation	Member
12	Thiru. K.R.Selvaraj Commissioner, Salem Corporation	Member
13	Thiru. Seeni Ajmalkhan, Commissioner, Erode Corporation	Member
14	Thiru T.Kumar, Commissioner, Vellore Corporation	Member
15	Tmt.R.Poongodi Arumaikkan, Commissioner Thoothukudi Corporation	Member
16	Thiru M.Ashokan, Commissioner, Tiruppur Corporation	Member

The Chairperson and Managing Director, TUFIDCO elaborated the process adopted such as Citizen Engagement, Impact on the population, the rationale behind selection for Area Based Development and PAN city Development Strategy by the Corporations for finalizing the 10 Smart Cities proposals before the Committee.

The Committee reviewed the Proposals presented by the 10 Corporations and deliberated in detail. The Committee accepted the rationale behind the strategy adopted by all the 10 Cities. The Committee requested to incorporate all the basic service projects in the ABD area and also explore the possibility of more PPP projects. The Committee also directed that the technological options presented would have to be evaluated in detail for their technical feasibility and financial sustainability during projectisation stage. On discussion, the Committee directed that the proposals be forwarded to Ministry of Urban Development, Government of India on-time.

K. P. S.
24/6/16

Principal Secretary,
Municipal Administration and Water Supply Department

P. R. S. Mohan Rao
24/6/2016

Chief Secretary to Government &
Chairman of the SHPSC

Municipal Administration and Water Supply Department

From
Thiru.T.Kumar, M.Com.,
Commissioner,
Vellore City Municipal Corporation,
Vellore 632001

To
The Director (SC) – I,
Ministry of Urban Development (MoUD)
Nirman Bhavan,
New Delhi – 110108

Roc.No.6209/2015/E1

Dated. 28.06.2016

Sir,

Sub: Submission of Revised Smart City Proposal - Vellore City Municipal Corporation for 2nd Stage Competition under Smart City Mission- Reg

We, Vellore City Municipal Corporation, are hereby submitting the Revised Smart City Proposal for 2nd Stage Competition. We have prepared the proposal as per the guidelines and formats provided by Smart City Mission of MoUD, GoI. Please find enclosed herewith the revised proposal for Vellore City in Five hard copies and one soft copy (1 DVD).



Commissioner

Vellore City Municipal Corporation


28.6.16


28/06/16

Encl:-

Five Hard Copies of Revised Vellore Smart City Proposal
One Soft Copy (1 DVD) of Revised Vellore Smart City Proposal

ANNEXURE 4.4

From
Tmt. P.Janakiraveendran,
M.Sc.,B.Ed.,APGDUM,
Commissioner,
Vellore City Municipal Corporation,
Vellore. 632001

To
The Director of Municipal
Administration
Chepauk
Chenna-5.

Roc.No.6209/2015/E1 Dated. 11.12.2015

Sir,

Sub: Smart Cities Mission – Vellore City Municipal Corporation – Smart City Proposal - Council Resolution – obtained – Proposal submitted – regarding

Ref: Vellore Corporation Council Resolution No.674 dated.11.12.2015

I enclose the copy of council resolution passed by the Vellore City Municipal Corporation on the smart city proposal. The enclosed proposal includes pan-city components and area based components in detail.


Commissioner 11/12/2015
Vellore Corporation

11.12.15

Enclosed: Council Resolution

Copy to

1. The Chairperson and Managing Director, TUFIDCO, Chennai-35
2. Mission Director, Smart Cities Mission, Ministry of Urban Development Government of India.



வேலூர் மாநகராட்சி

தீர்மான எண்: 674 நாள்.11.12.2015ல் நடைபெற்ற மாமன்றத்தின் பொருள் உண்மை நகல்

வேலூர் மாநகராட்சி மிகக்கான நகரத் திட்டம் - மாமன்றக் கூட்டத்திற்கான பொருள்

இந்திய அரசின் நகர்ப்புற வளர்ச்சி அமைச்சகத்தினால் தொடங்கப்பட்ட மிகக்கான நகர அளவில் திட்டத்தின் முதற்கட்டத் திட்டத்தில் சேர்க்கப்பட்டுள்ள 98 மாநகரங்களில், வேலூர் மாநகரமும் ஒரு நகரமாகும். கிரண்டவாது கட்டமாக, கிட்டிட்ட தனித்தன்மைக்கும் புதிய வடிவில் மிகக்கான மாநகரத்திட்ட நகரத்தின் அடிப்படை அமைப்பு, குடிமக்களின் எதிர்பார்ப்பு, அனுபவமிக்கவர்களின் கலந்துரையில் பெற்ற கருத்துருக்களின் அடிப்படையில் மத்திய அரசிடமிருந்து கிட்டிட்டத்தின் கீழ் ரூ.500 கோடி பெற வேலூர் மாநகராட்சி அனுக வேண்டியுள்ளது. இந்திய அரசின் நகர வளர்ச்சி அமைச்சகத்தினால் மிகக்கான நகரத் திட்டத்திற்கு வகுக்கப்பட்டுள்ள வழிகாட்டுதலின்படி, வேலூர் மாநகராட்சி ஒருங்கிணைந்த கிரண்டு நகர வளர்ச்சித் திட்டங்களை உருவாக்கி நகரத்தில் மறுசீரமைப்பு மற்றும் மறுமலர்ச்சி உள்ளடக்கிய நிலப்பகுதி சார்ந்த வளர்ச்சியைக்கான நடவடிக்கை எடுக்கப்பட்டுள்ளது.

ஒருங்குசேர்த்த நகர வளர்ச்சி (Pan City Initiatives)

கீம்மாநகர குடிமக்களின் கலந்துரையாடலின்படி, போக்குவரத்து கிடற்பாடுகள் மற்றும் திடக்கழிவு மேலாண்மை கிவை கிரண்டு திட்டங்கள் கீம்மாநகராட்சியில் சீர்திருத்தப் பணிகள் என கண்டறியப்பட்டுள்ளது.

வேலூர் மாநகருக்கு புரிந்து கொள்ளக்கூடிய செயல்திட்டம்

மக்கள் போக்குவரத்தின் தன்மையை மேம்படுத்த, புரிந்து கொள்ளக் கூடிய செயல்திட்டம் ஒன்று உருவாக்கப்பட்டுள்ளது. வேலூர் நகரம் மிகுந்த மக்கள் நெருக்கம், நெருக்கமான முக்கிய சாலைகள் மற்றும் குறுகிய உள் சாலைகள் கொண்ட நகரமாகும். இதனால் தனியார் போக்குவரத்து மொத்த போக்குவரத்தில் 60%க்கு மேல் உள்ளது. மக்களும் தனியார் போக்குவரத்தை நம்பி கிருக்க வேண்டியுள்ளது. கிட்டிட்டத்தின் நோக்கத்தின்படி தனியார் போக்குவரத்து பயன்பாட்டிலிருந்து பொதுத் துறைக்கு மாற வேண்டியுள்ளது. இதற்காக போக்குவரத்து மேலாண்மைக்கும், போக்குவரத்தினை ஒருங்குபடுத்தி சாலை பாதுகாப்பான மேம்படுத்தவும், தொழில்நுட்ப வசதியினை கின்னும் தின்மை படுத்த வேண்டியுள்ளது. கிட்டிட்டக் கருத்திருவின் முக்கிய அம்சங்கள் கீழே தரப்படுகின்றன.

1. நகரத்தில் கடைசி கிலக்கிற்கான வளர்ச்சி

அ. உள்ளூர் நகர பேருந்துகளின் எண்ணிக்கையை அதிகரித்தல்

ஆ. உள்ளிருப்பு சாலைகளிலிருந்து முக்கிய சாலைகளுக்கு மக்களை அனுப்ப ஒருபுதிய உய்க்கும் அமைப்பை கொள்தல்

2. அறிவு சார்ந்த பொதுத்துறை போக்குவரத்து அமைப்பு

- அ. உய்தல் மற்றும் முக்கிய போக்குவரத்து அமைப்பதற்கு பேருந்துகளின் சரியான திடங்களைக் கண்டறிதல்
- ஆ. ஒவ்வொரு பேருந்து நிறுத்தும் திடங்களிலும் பேருந்து விவரங்கள் சார்ந்த பலகைகள் வைத்தல், உய்க்கும் மற்றும் போகும் திடங்கள் விவரம் ஆகியவற்றுடன் வந்து சேரும் வண்டிகளின் காலநேரத்தை தெரிவித்தல்.
- இ. விவரப் பலகைகள் வைத்தல் மற்றும் மின்னணு கியந்திரம் செயலிகள் மூலம் மக்கள் விபரங்கள் பெறும் அமைப்பு பேருந்துகளில் ஏற்படுத்தாதல், வலைதளம், செயலிகள் மூலம் பொதுத்துறை வண்டிகளுக்கு எம்மாட் கார்டு (Smart Cards) மூலம் பயணம் சீட்டு வழங்குதல்.

3. போக்குவரத்து மாதிரி மையங்கள்

CCTV கேமிராக்கள் மற்றும் மேற்காட்டு போக்குவரத்து புள்ளி விவரங்களைப் பயன்படுத்தி வண்டிகள் போக்குவரத்தினை தொடர்ந்து கண்காணித்தல்.

4. பொதுமக்கள் தகவல் அமைப்பு

- அ. மின்னணு விளம்பர பலகைகள் மற்றும் KIOSKS பங்குகள் மொத்தம் ஆறு முக்கிய திடங்களில் (தங்கக் கோயில், ரயில்வே நிலையம், கோட்டை, மண்டித் தெரு, காட்பாடி ஜங்ஷன் மற்றும் புதிய பேருந்து நிலையம்) அமைத்தல், தமிழ்நாடு அரசால் வழங்கப்படும் அனைத்து வசதிகளையும் மக்கள் அறியும் வண்ணம் செய்தல்.
- ஆ. பல்மொழி நடமாடும் கியக்கம் மற்றும் பொதுத் துறை KIOSKS போன்றவை சுற்றுலாதாரர்கள் தங்களின் பயணத்தை திட்டமிடவும், நகரத்தில் தங்கவும் வழிவகை செய்தல் கிந்த கியக்கம் சுற்றுலாதாரர்களுக்கு தேவையான பேருந்துகள் சார்ந்த விவரம் உய்வான வழித்தடங்கள், நகரத்தின் பரப்புரிமை கண்டறிதல், உணவுகங்கள், தங்கும் வசதிகள், பொது கழிப்பிடங்கள், தின்னபிறவும் அறியும் வகையில் தகவல்களை அளிக்கும்.
- இ. வேலூர் வாசிகள் நகரத்தின் ஊக்குவிசை மற்றும் குறைகளை பதிவு செய்யும் அமைப்பை அறிந்து கொள்ள கிந்த கியக்க ஊர்தி உதவி செய்யும்.

5. நடைமுறை, கொள்கை மற்றும் சட்ட ரீதியான பரிந்துரைகள்

- அ. அனைத்து வணிகம் சார்ந்த வண்டிகள் மற்றும் உள்நகர் பேருந்துகள் பசுமை வட்டத்திலிருந்து அப்துல்லாபுரம் - மாநில நெடுஞ்சாலை 122-203-போகூர் - வேலூர் சாலை, மூலம் மேற்கொண்டு காலை 6 மணி முதல் கிரவு 10 மணி வரை போக்குவரத்து நெரிசலைக் குறைத்தல். கிந்த கண்டறியப்பட்ட வழித்தடத்தில் சரியான வளர்ச்சி தில்லை என்பதால், கிந்தப் பகுதியில் மறுவழித்தடங்களை உண்டாக்குதல் ஒன்றே சிறந்த வளர்ச்சியைப்பெற உள்ளாற்றல் மிகுந்ததாக உள்ளது. கிதனை நிறைவேற்ற புதிய உண்மையான மண்டல கொள்கை மற்றும் வளர்ச்சி கட்டுப்பாடு விதிகள் குறிப்பிட்ட பகுதிக்கு கிந்த 2016-17ம் ஆண்டில் தொடங்க உத்தேசிக்கப்பட்டுள்ளது.

ஆ. ஆட்டோ வண்டி நிலையங்கள் சங்கங்களைப் பதிவு செய்தல், ஆட்டோ ஓட்டுனர்களின் கட்டணத்தை ஒழுங்குபடுத்துதல், குடிமக்களின் நன்மைக்காக குறிப்பாக ஆட்டோ வண்டிகள் பயணத்திற்கு, மகிழ்ச்சியான ஆட்டோ நடமாடும் தியக்கம் உருவாக்குதல் ஆட்டோ ஓட்டுனர்கள் தங்களது முதலீட்டினை "ஏற்றுக் கொள்ளுதல் மற்றும் ஊதியம் பெறுதல்" செயலுக்கு மாற்றிக்கொள்ள முனைய வைத்தல். இந்த திட்டத்தின்படி சிறந்த சந்தோஷமான ஆட்டோ நிலையத்திற்கு சுழற்கேடயமும் + ரூ.5.00 லட்சம் தொகையும் பரிசாக ஒவ்வொரு ஆண்டும் ஆகஸ்டு 15ல் வழங்கல்.

மாநகரில் பன்முக திடக்கழிவு மேலாண்மைத் திட்டம்

திடக்கழிவு மேலாண்மைத் திட்டம் பொறுத்தவரை, பன்முக திடக்கழிவு மேலாண்மை திட்டம் முதன் முதலாக வேலூரில் செயலாக்கத்திற்கு கொண்டு வரப்பட்டுள்ளது. இதன்படி வேலூர் மாநகரில் மொத்தம் 42 திடங்கள் கண்டறியப்பட்டுள்ளது. திவற்றில் மாதிரி குப்பை சேகரிப்பு முறையை சரியாக நடைமுறைப்படுத்தி பதப்படுத்துதல், மறு சுழற்சி செய்தல் ஆகியவை ஏற்படுத்தப்பட்டுள்ளன. மிகக்கூடிய நகரத்திட்டத்தில் தற்போது உத்தேசித்துள்ள ஒருங்குசேர்ந்த நகரவளர்ச்சித் திட்டத்தில் உள்ளடக்கியுள்ள விஷயங்கள் கீழே தரப்படுகின்றன.

1. திடக்கழிவுகளை அகற்றும் வாகனங்களில் ரூபூறு கருவிகள் மூலம் அவ்வாகனங்கள் பணிகளைக் கண்டறிதல்
2. திடக்கழிவுகள் அகற்றுபவர்களுக்கு கையளவிலான நடமாடும் கருவிகள் கொடுத்தல்
3. குடிமக்களின் நல்வாழ்வின் அடிப்படையில் நடமாடும் தியக்கம்.
4. அறிவார்ந்த மேலாண்மை மற்றும் மதிப்பீடு அமைப்பு ஏற்படுத்துதல்.
5. தூய்மையான நகரத்திற்கு வேலைத் திட்டம் தயாரித்தல்.

பகுதி அடிப்படையிலான மேம்பாடு (Area Based Development)

பகுதி அடிப்படையிலான மேம்பாட்டுத்திட்டப் பகுதியாக, மொத்தம் 1588 ஏக்கர் பகுதி இந்த திட்டத்தில் சேர்க்கப்பட்டுள்ளது. இதில் 16, 17, 18, 23, 24, 25, 26, 27, 28, 29, 59 வார்டுகள் அடங்கும்.

இந்த வரைவால் ஏறக்குறைய 95488 மக்கள் 24000 குடும்பங்கள் மற்றும் 7317 வணிகம் சார்ந்த நிறுவனங்கள் பயன்பெறும். வேலூர் மாநகரின் வளர்ச்சிக்காக தேர்வு செய்யப்பட்ட இப்பகுதி பகுதியான சக்திவாய்ந்த ஆய்கமாக அமையும் என்பதால் இந்த இடம் தேர்வு செய்யப்பட்டது. தேசிய நெடுஞ்சாலை, கோட்டை, சில முக்கிய மருத்துவ மற்றும் கல்வி நிறுவனங்கள், வணிக நடவடிக்கைகள் வறுமை சார்ந்த மக்கள் வாழும் பகுதிகள் மற்றும் சிறு தொழில் நிறுவனங்கள் போன்றவை இந்தப் பகுதியில் அமைந்துள்ளதால், இந்தப்பணி உயர்ந்தப்பட்ச சக்தி பகுதியாக அமைகிறது.

மேலும் இந்தப் பகுதி பல பெரிய பயன்படுத்தான நில பிரிவுகள் உள்ளதால், இவை புதிய வளர்ச்சியுடன் சரியான சேரும் வாய்ப்பும் உள்ளது. இந்தப்பணி கிழக்கு மேற்காக உள்ளதால், முக்கிய வழித்தடங்களுக்கு, அதாவது நகருக்கு வரவும் நகரைவிட்டு வெளியே செல்லவும் நுழைவு வாயிலாக உள்ளது. எனவே இது வருங்கால

வளர்ச்சிடையும் வேலூர் நகரின் மற்ற பகுதிகளின் வளர்ச்சியை பரப்பவும் அமையும் எனத் தெரிகிறது.

மொத்தம் 1589 ஏக்கர் திட்டப்பரப்பில் 50 ஏக்கர் கேரேஜ் பகுதியாக மறு வளர்ச்சி செய்யப்படவுள்ளது. திது நீங்கலாக மீதியுள்ள பகுதி சீர்திருத்தம் மற்றும் மறுநிர்மாணம் பணி மூலம் ஏற்றம் செய்யப்படும். கீழ்க்கண்ட பணிகள் திட்ட பகுதி அடிப்படையிலான வளர்ச்சித் திட்டத்தின் கீழ் திட்டமிடப்பட்டுள்ளன.

1. வேலூர் தொழில்நுட்ப பல்கலைக் கழகம் மூலம் வேலூர் மாநகராட்சி மற்றும் மாவட்ட ஆட்சியரகத்தின் அரசின் ஒருவழி உதவியுடன் கிடவசதி / பணி தொடங்க நிதி வசதிக்காக "Make-in India" அடைகாத்தல் மையம் தோற்றுவித்தல்.
2. பழைய பை-பாஸ் சாலையில் அமைந்துள்ள மிகு உந்துவண்டிகள் பணிமனைகளை வேறு கிடத்தில் மாற்றி அமைத்தல். திட்ட கிடத்தை கலப்ப பயன்பாட்டுப் பகுதியாக மறுவளர்ச்சி (வணிகம், சில்லரை விற்பனை அலுவலகப்பகுதி மற்றும் குறிப்பாக ஏழைகளுக்கு ஏற்றப்படி குடியிருப்புகள் அமைத்தல்) செய்தல்.
3. மரபுரிமை மற்றும் பொழுதுபோக்கு
அ. நகர் மற்றும் மரபுரிமை சார்ந்த கவர் சித்திரங்களுடன் நகர் தகவல் மையம் மற்றும் சுற்றுலா தகவல் உதவி மையம் அமைத்தல்.
ஆ. கோட்டை அருங்காட்சியக ஒவ்வொரு அருங்காட்சியையும் ஒலி-ஒளி மூலம் பார்க்க உருவ பிரதிபலிப்பு நடமாடும் தியக்கம் அமைத்தல்.
இ. IIT சென்னை மூலம் விஞ்ஞான பூங்கா அமைத்தல்
ஈ. படக்காட்சி கிடம் - கலைஞர்கள் கலை நிகழ்ச்சி நடத்த பண்பாட்டு மையம் அமைத்தல்
உ. கோட்டை காட்சி கல்நெரி மையம் - உணவு விழாக்கள் நடத்த அமைத்தல்
ஊ. மலைஅடிவாரத்தில் நடக்கவும், மிதிவண்டி ஓட்டவும் தடம் ஏற்படுத்துதல் மற்றும் சத்துவாச்சாரி மலையின் உச்சியில் வானாராட்சி நிலையம் அமைத்தல்.
எ. ஆகாய பார்வை வானாராட்சி மையத்திற்கு நடக்கவும், மேலேறவும் தடம் ஏற்படுத்துதல்
4. தியக்கம்
அ. உரிமையுடன் நடக்கவும் மதிவண்டி ஓட்டவும் நகரில் பொழுது போக்கு கிடங்கள், மரபுரிமை வண்டி நிறுத்துமிடம், பேருந்து நிலையங்கள் மற்றும் அங்காடி பகுதிகளுடன் சேர பாதை அமைத்தல்
ஆ. வண்டி வாகனங்கள் போகாத / வண்டி வாகனங்கள் நிறுத்தாத / குறிப்பிட்ட நேரங்களில் மட்டும் வண்டி நிறுத்தும் கிடங்கள் குறித்து புரிந்து மேலாண்மை செய்தல்.
இ. அனைவரும் ஏற்றுக் கொள்ளத்தக்க NMTS மற்றும் IPTS வுடன் ஒருங்கிணைந்த பொதுத்துறை போக்குவரத்து அமைப்பு
ஈ. சூரிய ஒளி மின்சக்தியுடன் கூடிய மின்னியல் மிதிவண்டி நிலையம்.

உ. திடத்தைத் தெரிவிக்கும் தகவல் பலகைகள் ஒவ்வொரு சாலை கூடும் திடங்களில் நிறுவதல்.

ஊ. உணர்வு அடிப்படையிலான விபத்து தடுப்பு அமைப்பு ஏற்படுத்துதல்

5. அடிப்படை வசதிகள் மற்றும் பயன்பாட்டு பொருள்கள் மேலாண்மை.

அ. அனைத்து அரசு பட்டியல்களும் மின்னியல் மற்றும் Kiosk அடிப்படையிலான ஒருவழி மூலம் பணம் செலுத்தல் (மின்சாரம், குடிநீர், சொத்துவரி, தின்னபிற)

ஆ. ஓட்டேரி நீர்நிலையம், கோட்டை அகழி மற்றும் மழைகாலங்களில் மழைநீர் வடிகால்கள் ஆகியவற்றில் நீர்அளவு மேலாண்மை செய்தல்.

கி. கழிவுகள் மேலாண்மை, தெரியவைக்கும் வசதியுடன் புதிய கழிவு சுத்திகரிப்பு நிலையங்கள் கட்டுதல், சுத்திகரிக்கப்பட்ட கழிவு நீரை மறுபயன்பாட்டிற்கு கொண்டுவருதல்.

ஈ. நிரம்பிவழியும் கழிவு அமைப்புக்களைக் கண்டறிதல்.

உ. நடமாடும் மின்னியல் மற்றும் நிரந்தர கழிவுகைகள்-நீர் அளவு மேலாண்மை மற்றும் குடிமக்கள்.

ஊ. விரைவான அசைரகால பொறுப்பு அமைப்பு.

எ. காற்று மாசுபாடு மேம்பாடு அமைப்பு.

ஏ. மின்னியல் மேலாண்மை அமைப்புடன் 100% சக்தியுடன் தேர்ந்த தெருவிளக்குகள்.

ஐ. மிகக்கான மின்சாரம் மற்றும் குடிநீர் அளவுமாணிகள்.

ஓ. குடிநீர் தன்மை மேலாண்மை

ஔ. தவறிய அழைப்பு அடிப்படையில் குடிநீர் வினியோகத்திற்கான காலநேரம் கண்டறிதல்.

ஐ. பூமிக்கடியில் வடம் அமைத்தல்.

சிறப்பு நோக்க வண்டி (Special Purpose Vehicle)

இந்திய அரசின் நகர்ப்புற வளர்ச்சி அமைச்சகத்தின் வழிகாட்டுதலின்படி ஒரு சிறப்பு நோக்க வண்டி ஏற்படுத்தப்படவுள்ளது. பயன்பாட்டு கட்டணம் அல்லது வரி உயர்வு மூலம் நிதியாண்மை புதிய முறைகள் மூலம் தேவையான நிதியைக் கண்டறிதல் ஆகியவற்றிற்கு இவ்வமைப்பிற்கு அதிகாரம் அளிக்கப்படும். மிகக்கான நகரம் சார்ந்தமைக்குரிய கட்டுமானம் மற்றும் பராமரிப்பு இந்த தியக்கத்தின் கடமையாகும். MOUD தெரிவிக்கும் அறிவுரைகளின்படி இந்த தியக்கம் அமைக்கப்பட்டு செயல்பாட்டுக்கு கொண்டு வரப்படும். அதன் செயல்பாடுகள் MOUD தெரிவிக்கும் அறிவுரைகளின்படி செயல்படும்.

நிதிப்பங்கீடு:-

இந்த மிகக்கான நகரத்திட்டத்தின் முழு கால மதிப்பீடு ரூ.1445 கோடி என மதிப்பிடப்பட்டுள்ளது. இதில் கிடைவெளி பகுதி அடிப்படையிலான திட்டத்திற்கு ரூ.1405 கோடி செலவிடப்படும். ஒருங்கு சேர்ந்த நகர் திட்டங்களுக்கு (Pan city Initiatives) ரூ.40 கோடி செலவிடப்படும் மூன்று முக்கிய கட்டங்களில் திட்டிட்டச்

செலவுக்கான பட்டியல் கீழ்க்கண்டவாறு உள்ளதாக அமையும். கட்டம்-1 (முதல் முன்று ஆண்டுகளில் முதற் கட்ட முதலீடு சக்கரம்) தேவையான மொத்த முதலீடு ரூ.688 கோடி (ஒருங்கு சேர்ந்த நகர் வளர்ச்சி திட்டங்களுக்கு (Pan City) ரூ.12 கோடியும், பகுதி அடிப்படையிலான முன்னேற்றப் பணிகளுக்கு ரூ.676 கோடியும்) உள்ளடங்கும் அடுத்த கட்டம் (4 முதல் 20 ஆண்டுகள் வரை) பணிகளுக்கு ரூ.757 கோடி (Pan City-க்கு ரூ.28 கோடியும், பகுதி அடிப்படையில் முன்னேற்றப் பணிகளுக்கு ரூ.729 கோடியும்) செலவு செய்யப்படும்.

ஒருங்குசேர்ந்த நகர்திட்டம் (Pan City Project) நகர்ப்பகுதியில் போக்குவரத்துக்காகவும் (அறிவுசார்ந்த போக்குவரத்து அமைப்பால் நகர்சாலைகளில் நெரிசல் குறைத்தல்) மற்றும் திடக்கழிவு மேலாண்மைத் திட்டம் (திடக்கழிவு மேலாண்மை மதிப்பு சங்கிலியை மிகுக்கான மேலாண்மை செய்தல்) உள்ளடக்கியதாகும். குறிப்பிட்ட தினங்கள் தனியார் பங்களிப்பினை மேற்கொள்ளுதல் ஆகியவை மிகுக்கான நகர் SPV திட்டம் மூலம் அமைப்புக்களுக்கு உதவிபுரியும். இந்த அளவீடு 7 X என்ற பெருக்கத்தில் பொதுமக்களின் மொத்த மதிப்பீட்டுத் தொகையில் 14% உதவியோடு உருவாக்கும். திட்ட செலவில் ஒரு பகுதி செலவினை மட்டும் SPV நிதிவழிவகை பயன்படுத்தும். தியக்கல் மற்றும் பராமரிப்பு தனியார் வசமே இருக்கும். திதனை மாற்றத்தக்க வகையில் (மறு முதலீடு செய்தல்), தனியார் வசமிருந்து அரசு நிதிபங்கீடு பெறும். திது சொத்து தினங்களுக்கு ஒத்துபோவதால், மிகுக்கான நகர வளர்ச்சி ஆதாரத்திற்கு திதனைப் பயன்படுத்திக் கொள்ளலாம்.

பகுதி அடிப்படையிலான முன்னேற்றப் பணிகள் பொறுத்தவரை, திதனின் மொத்த மதிப்பீடு ரூ.676 கோடி ஆகும். திதில் குடிநீர் மிகுக்கான திட்டத்திற்கு ரூ.34 கோடி, எதிர்பார்க்கும் அதிகச் செலவு மற்றும் கழிவுகள் மேலாண்மை பணிக்கு ரூ.4.00 கோடியும், கழிவுகள் அகற்ற போக்குவரத்து மற்றும் சுத்திகரிப்பு உட்கட்டமைப்புகளுக்கு ரூ.22 கோடியும், மின்னியல் பொது கழிப்பிடங்கள், மழைநீர் வடிவால்கள் புதுப்பித்தல் மற்றும் நீர்த்தேக்கங்களில் நீர்வடிதலைத் தடுத்தலுக்கு ரூ.22 கோடி, மிகுக்கான மின்சார அளவுமாணி மற்றும் பூமிக்கடியில் சக்தி விநியோகம் செய்தல் பணிக்கு ரூ.45 கோடி, தெரு விளக்குகள், மற்றும் தகவல் பலகைகளுக்காக ரூ.15 கோடியும், மோட்டார் தில்லாத போக்குவரத்துக்கு ரூ.74 கோடியும், சுற்றுலா வளர்ச்சிக்கும், பொழுது போக்குக்கும் ரூ.50 கோடியும், வண்டிகள் நிறுத்துமிடம் மற்றும் பொது போக்குவரத்துக்கு ரூ.66 கோடியும், வேலூர் கோட்டை பகுதியில் வளர்ச்சிக்கு ரூ.51 கோடியும் மற்றும் அபிவிருத்திக்கு திட்டத்திற்கு ரூ.171 கோடியும், நகரை அழகுப்படுத்தும் பணிக்கு ரூ.84 கோடியும், நவீன தொழில்நுட்பத்தைப் பயன்படுத்தி பொதுத் தொண்டு முன்னேற்றப் பணிகள் மேற்கொள்ள ரூ.23 கோடியும் அமையும்.

தற்போது உத்தேசித்திருக்கும் பகுதி அடிப்படையிலான முன்னேற்றப்பணிகள் மற்றும் PAN City திட்டங்கள் தியக்கல் தேதி தொடக்கத்தை நிறைவேற்றும். திதில் முதல் திரண்டு வருடங்களுக்கு முதலீடுகளின் மீது கவனம் தேவைப்படுகிறது. ஏனெனில் அடுத்த நான்கு ஆண்டுகளில் மத்திய அரசின் மான்யத் தொகையும், மாநில அரசின் ஈடுமான்யமும் வந்து சேரும். எனவே திந்த நிதி வழிவகை திடைவெளியை திணைக்க, நிதியை எதிர்பார்த்து திட்ட செயற்பாட்டை சுணக்கம் தில்லாமல் நிறைவேற்றுவதை உறுதி செய்ய ரூ.200 கோடி கடன் தொகை மாநில அரசால்

(ஆண்டுக்கு 9% வட்டியில்) வழங்க திட்டமிடப்பட்டுள்ளது. இந்த வழிவகை, பாண்டுகள் வழியாக மாற்றத் தக்கவையாக கொண்டுவரப்படும்.

ஒரே திட்டத்தில் மேலே கண்ட வளங்கள் கூடுவதால் திட்ட வாழ்க்கை முழுவதும் திட்டச் செலவினை உறுதி செய்ய திட்டப் பயன்பாடுகளின் எச்சரிக்கையான அமைப்புப்படி போற்றத்தக்க வகையில் நிதி வழிவகை உள்ளது. திட்டமிட்ட திட்ட இனங்களின்படி குறிப்பிட்ட தொண்டு பணிகளுக்கான பயன்பாட்டுக் கட்டணம், விளம்பரச் செலவு, சொத்துவரி உயர்த்துதல் ஆகிய மூன்று வழிவகைகள் தோன்றியுள்ளன (பகுதி முன்னேற்றம் மற்றும் PAN City) வாழ்க்கைக் கால திட்டச் செலவு ரூ.455 கோடி ஆகும். மொத்த (வாழ்க்கை சக்கரம்) திட்டச் செலவு ரூ.1445 கோடியில், இச்செலவு 31% ஆகவுள்ளது. இதனால் தொடர் கூட்டு திட்டச் செலவு (கியக்கல் மற்றும் பராமரிப்பு உட்பட) ரூ.2000 கோடி ஆகும். எனவே மத்திய அரசின் மான்யத் தொகை ரூ.500 கோடி கணக்கீடு செய்ததில் மொத்த கூட்டுத் தொகை நகரில் 4 X என்ற அளவில் உயர்ந்து உள்ளது. புத்தி கூர்மை செயல்பாட்டினால் திட்டங்களை கண்டறிதலுக்கு சான்றாக அமைந்துள்ளது. இது உச்ச பெருக்கத்திற்கும் தொடர் நிலைக்கும் ஏற்றதாகும்.

அலுவலக குறிப்பு:-

பொருளில் கண்டுள்ளவாறு மேற்படி திட்டங்கள் மற்றும் அமைப்புகளை அமைத்து வேலூர் மாநகராட்சியை மிகக்கூடிய நகரமாக மாற்றம் செய்வதற்கு மாமன்றம் அனுமதி வழங்கலாம். மத்திய மாநில அரசுகள் விதிக்கும் விதிமுறைகளுக்கு உட்பட்டு செயல்படலாம்.

தீர்மான எண்: 674 1) இப்பொருளில் பக்கம் எண்.4ல் பகுதி அடிப்படையிலான மேம்பாடு (Area Based Development) - தலைப்பின்கீழ் குறிப்பிடப்பட்டுள்ள பகுதி அடிப்படையிலான மேம்பாட்டுத்திட்டப் பகுதியாக மொத்தம் 1588 ஏக்கர் பகுதி இந்த திட்டத்தில் சேர்க்கப்பட்டுள்ளது. இதில் 16, 17, 18, 23, 24, 25, 26, 27, 28, 29, 59 வார்டுகள் அடங்கும் என உள்ளதில் வார்டு எண்.58க்குட்பட்ட கோட்டை பகுதியும் அடங்கும் என குறிப்பிடப்பட்டு அனுமதி வழங்கப்பட்டது.

2) இத்தீர்மானம் நிறைவேற்றப்பட்டது.

(ஓம்)பா. கார்த்தியாமினி
மேயர்
வேலூர் மாநகராட்சி

/உண்மை நகர்/


வேலூர் மாநகராட்சி
11/12/2015

ANNEXURE 4.5

Dr.R.NANTHAGOPAL, I.A.S.,
COLLECTOR,
VELLORE DISTRICT.



Phone : 0416 - 2252501, 2253512 (0)
: 2253516, 2252752
: 0416 - 2252345 (P)
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Vellore
December 10th, 2015

To,
The Mission Director
Smart Cities Mission
Ministry of Urban Development

Dear Sir,

Subject: Letter of support towards co-ordinating and delivering the Pan- City and Area Based Initiatives under the Smart City Mission in Vellore City Municipal Corporation.

It gives me great pleasure to note that Vellore City Municipal Corporation (VCMC) has been shortlisted to participate in the Smart City Challenge. VCMC is a fast growing Corporation in Tamil Nadu and has been chosen to be developed as a model city for other mid-sized Corporations by the World Bank in the state. Strategically positioned on the Chennai- Bangalore Corridor, the city has great potential and with the right kind of investments and planning support can truly emerge as a 'Smart' model city for other corporations in the country.

As part of the Smart city initiative, we hope to undertake a host of projects under Pan City and Area Based components. We understand that several of these projects fall under the ambit of different line departments and state and central government agencies. I assure you our full support to the newly set up Special Purpose Vehicle in facilitating the required institutional and functional co-ordination across state departments in enabling the implementation of the smart city plan components as outlined below:

Pan City Components

1. Comprehensive 'Smart' Mobility strategy for Vellore

Funding for core infrastructure components such as buses and shelters will be provided through PPPs while only funding for the ICT and geo-spatial components is sought through the smart city mission

Projects/Activities Planned	Departments
Improving Last Mile Connectivity by introducing feeder systems in sub-arterial roads	RTO & State Transport Department
Increase in number on intra-city buses	State Transport Department
Tracking the exact bus location of both feeder and arterial transportation systems	State Transport Department
Single E-ticketing System	State Transport Department
Modernization of Bus Stops including Digital Display boards and Kiosks	Vellore City Municipal Corporation
Traffic Surveillance and wireless monitoring	Police Department & Traffic Department
Multi lingual public information systems including digital display board and Mobile Apps for tourist and floating population	Vellore City Municipal Corporation
Decongesting traffic through re-routing all commercial freight vehicles and inter-city buses through green-circle and Abdullahpuram to the new bus stand	Vellore City Municipal Corporation and Police and Traffic Departments

C.P.Chitrarasu Building, E.V.R. Maniyammai Complex, Sathuvachari, VELLORE - 632 009.

Registration of all Auto and Auto stands and regularization of fee through mobile based apps.	RTO & Police Department
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2. Smart Decentralized Solid Waste Management Programme

This programme entails developing a comprehensive strategy to implement a decentralized solid waste management strategy. 42 locations have already been identified and the programme will entail creating the required primary collection and treatment infrastructure along with smart city elements such as:

1. GIS enabled refuse collection vehicles to track the position of the vehicle.
2. Hand held mobile devices for refuse collectors
3. Citizen friendly mobile app
4. A comprehensive Monitoring and Evaluation system
5. A City Cleanliness framework.

This programme will be de designed and implemented by Vellore City Municipal Corporation

Area Based Components

Under the Area Based Plan, the following components are being proposed in the identified area of 1588 acres.

Projects/Activities	Department
Redevelopment of the garage centre currently located in a 50 Acre Land parcel next to the fort. Efforts to re-settle the shops to a new location are already underway.	Vellore District Collectorate, Vellore City Municipal Corporation and Police Department
Setting up of a Sky Observatory at Sathuvachari hills along with a trekking facility	District Forest Department and Vellore City Municipal Corporation
Underground power cabling, setting up of smart meters, online payment system, net metering arrangements for solar rooftop	Tamil Nadu Electricity Board
Upgradation of Street lights as intelligent Poles, Smart water meters, central infrastructure for online payments of user charges and VAN based collection systems, setting up of utility kiosks at corporation and zonal offices for ease of payment, water quality sensors in ESRs, Mobile based water supply distribution timing systems, development of Palar river front, construction of Public E-toilets along with smart features to report cleanliness, water levels and consumer satisfaction, Decision Support systems to monitor DSS for water levels monitoring in Otteri Reservoir, Fort Moat & SWDs during rainy season, Septage Management; construction of new STP with decanting facility & reuse of treated wastewater, setting up air pollution	Vellore City Municipal corporation

monitoring system, creation of science park, Creation of Multi-layer smart parking near new bus stand and retrofitting and upgradation of new bus stand, creation of Pedestrian pathways and cycling facilities	
Establishment of the Cultural Centre of State Government next to the Old Bus Stop	Archaeological Survey of India and Vellore District Collectorate
Creation of digital audio-visual content that may be accessed through hand-held devices in the fort museum, De-silting of the Moat, Facilitation of Boating services in the Moat , Aesthetic Lighting of the Fort, Improvement of the gardens	Archaeological Survey of India
Timed parking near the market area opposite Fort, creation of no-parking zones adjacent CMC	Traffic and Police Department
Express Emergency Response Number and mobile APP, Backend IT infrastructure and Handheld devices to all emergency response units, Surveillance camera in all important nodes of the City, commercial area, and market areas in the city.	District Fire Service Department, Police, Traffic, 108 ambulance
Wall painting and colour coding major gateways in each of the major gateways to the city depicting city's key specialties such as Fort, Science Park.	Buildings Department
Staircase to highway bridge near the flyover and bicycling tracks on select stretches	Highways Department

Thank you

A. Nataraj 7/10/12/15.

Seal and Signature

COLLECTOR,
VELLORE DISTRICT,
VELLORE - 632 008

ANNEXURE 4.6

TAMILNADU GENERATION AND DISTRIBUTION CORPORATION LIMITED

Er. S.K. PERUMALSAMI, M.I.E.,
Superintending Engineer,



Vellore
10th December, 2015

To,
The Mission Director
Smart Cities Mission
Ministry of Urban Development

Lr.No.499/SE/VEDC/Dev/AEE/AE-2/SDM/F.Smart City/2015, Dated: 10.12.2015

Dear Sir,

Subject: Vellore Electricity Distribution Circle- Letter of support towards co-ordinating and delivering the Pan- City and Area Based Initiatives under the Smart City Mission in Vellore City Municipal Corporation.

!***!***!

It gives me great pleasure to note that Vellore City Municipal Corporation (VCMC) has been shortlisted to participate in the Smart City Challenge. As part of the Smart city initiative, we hope to undertake a host of projects under Pan City and Area Based components.

We understand that the following projects fall under the ambit of TNEB, Vellore District. I assure you our support to the newly set up Special Purpose Vehicle in facilitating the required smart city components.

Components under the ambit of TNEB

- Underground power cabling, setting up of smart meters
- Online payment system, smart phone based payment ect...
- Net metering arrangements for solar rooftop

Thank you

Yours faithfully,

Ed. Perumalsami - 10/12/15
**SUPERINTENDING ENGINEER,
VEDC/VELLORE**

ANNEXURE 4.7

Government of India
Archaeological Survey of India.

Office of the Conservation Assistant,
Archaeological Survey of India,
Vellore sub - circle,
Fort, Vellore - 632 004.

No.VLR.17/1010/Dated: 10.12.15

To,
The Mission Director,
Smart Cities Mission,
Ministry of Urban Development.

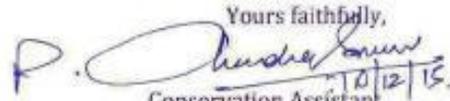
Sir,

Sub : Letter of support towards co-ordinating and delivering the Pan - City and Area Based Initiatives under the smart city mission in Vellore City Municipal Corporation - Regarding.

With reference to the subject cited above, it gives me great pleasure to note that Vellore City Municipal Corporation (VCMC) has been shortlisted to participate in the Smart City Challenge. As part of the Smart city initiative, we hope to undertake a host of projects under Pan City and Area Based components. We understand that the following projects fall under the ambit of Archaeological Survey of India, Vellore sub - circle. I am informing you our support on the proposed projects under the smart city components.

Components under the ambit of Archaeological Survey of India, Vellore sub - circle, Vellore.

Creation of digital audio - visual content that may be accessed through hand-held devices in the fort museum, De-silting of the Moat, Facilitation of Boating services in the Moat, Aesthetic Lighting of the Fort, Improvement of the gardens.

Yours faithfully,

Conservation Assistant,
Archaeological Survey of India,
Vellore sub - circle,
Fort, Vellore - 632 004.

ANNEXURE 4.8

1284 / 4

TAMIL NADU FIRE AND RESCUE SERVICES

FROM

Mr. C. Murugesan, B.Sc. Bcd,
Assistant district officer,
fire and rescue services,
Full additional charge,
District officer,
Vellore district, vellore.

TO

Mr. Vinod Ramnarayanan
Consultant,
Vellore Smart City

R.C.No. 8382/S2/2015

Date: 11. 12. 2015

Sir,

Sub: Fire and Rescue Services - Vellore District - Implementation of the Vellore smart city plan - Sent - Regarding.

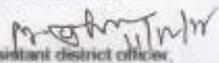
Ref: Your mail dated on 10-12-2015.

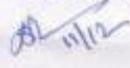
We are referred to implementation of smart city in vellore, to the following facility in our city please providing Hydrant Point to refill water to our Emergency vehicles in the following places 1. Konavattam 2. Old Bus stand 3. Near CMC and 4. Collectorate. Kindly implement our suggestion.

Thanking you

Copy to: 1. Mrs. Janaki Ravendran - Commissioner,
Vellore City Municipal Corporation
Mrs. Deepa Kathykeyan - Director,
Athens Informatica

Your faithfully


Assistant district officer,
fire and rescue services,
full additional charge,
district officer,
vellore district, vellore.




ANNEXURE 4.9



December 11th, 2015

To,

The Mission Director
Smart Cities Mission
Ministry of Urban Development

Dear Sir,

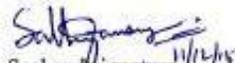
Subject: Letter of support towards implementation of the Vellore Smart city plan

It gives me great pleasure to note that Vellore City Municipal Corporation (VCMC) has been shortlisted to participate in the Smart City Challenge. VIT is a premiere Technical Institution in Vellore. We share the city's vision to emerge into a planned, sustainable and world-class metropolis and will be happy to contribute in enabling this by participating the implementation of the smart city plan.

As part of this initiative we offer our support towards:

- Setting up of a Traffic Research Centre and provide advisory support to the corporation towards pro-active management of traffic through modeling traffic data generated from multiple ICT modes
- Providing technical assistance in creating and managing the incubation centre proposed in the smart city plan.

Thanks and Regards


Seal and signature 11/12/15

Vellore - 632 014, Tamil Nadu, India; Phone: 91- 416 - 2243091 (10 Lines) Fax : 91 - 416 - 2243092
E-mail: registrar@vit.ac.in www.vit.ac.in

ANNEXURE 4.10



Centre for Sustainable Rural Development and Research Studies

December 14th, 2015

To,
The Mission Director
Smart Cities Mission
Ministry of Urban Development

Dear Sir,

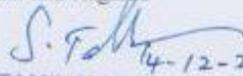
Subject: Letter of support towards implementation of the Vellore smart city plan

It gives me great pleasure to note that Vellore City Municipal Corporation (VCMC) has been shortlisted to participate in the Smart City Challenge. Vellore Institute of Technology is a premiere Technical institution in Vellore. We share the city's vision to emerge into a planned, sustainable and world-class metropolis and will be happy to contribute in enabling this by participating the implementation of the smart city plan.

As part of this initiative we offer our support towards:

- Facilitating entrepreneur research in technology and social sector through the Vellore Incubation Centre
- Facilitate the students to involve in arriving a techno solution for the existing problems in Vellore.
- Coordinate the efforts of welfare associations, clubs and similar organizations to support the VCMC in projects like Municipal solid waste Management .Greenification etc.
- To coordinate the civic efforts for better implementation of Smart City Project

Thanks and Regards


4-12-2015

S. TAMIL MARAN,
Project Officer,

Centre for Sustainable Rural
Development and Research Studies,
VIT University, Vellore - 14

ANNEXURE 4.11

PP 029

தமிழ்நாடு அரசு போக்குவரத்துக் கழகம்
(விழுப்புரம்) லிமிடெட், விழுப்புரம் - 605 602.
(தமிழ்நாடு அரசு நிறுவனம்)

TAMILNADU STATE TRANSPORT CORPORATION
(VILLUPURAM) LIMITED, VILLUPURAM - 605 602
(A Government of Tamilnadu Undertaking)

Lr.No.7475/Dm(Coml)/TNSTV(VPM)/Vellore/2015

Dated.10.12.2015

To

The Mission Director
Smart Cities Mission
Ministry of Urban Development

Dear Sir,

Subject: Letter of support towards co-ordinating and delivering the Pan- City and Area Based Initiatives under the Smart City Mission in Vellore City Municipal Corporation.

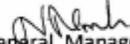
It gives me great pleasure to note that Vellore City Municipal Corporation (VCMC) has been shortlisted to participate in the Smart City Challenge. As part of the Smart city initiative, we hope to undertake a host of projects under Pan City and Area Based components. We understand that the following projects fall under the ambit of Tamil Nadu State Transport Corporation, Vellore District. I assure you our support to the newly set up Special Purpose Vehicle in facilitating the required smart city components.

Components under the ambit of Tamil Nadu State Transport Corporation, Vellore District

- Improving Last Mile Connectivity by introducing feeder systems in sub-arterial roads
- Increase in number on intra-city buses
- Tracking the exact bus location of both feeder and arterial transportation systems
- Single E-ticketing System
- Modernization of Bus Stops including Digital Display boards and Kiosks
- Decongesting traffic through re-routing all commercial freight vehicles and inter-city busses through green-circle and Abdullahpuram to the new bus stand

Thank you,

Yours faithfully,
For TNSTC(VPM) Ltd., Vellore Region


General Manager
General Manager
Tamilnadu State Transport Corpn
(Villupuram) Ltd., Vellore Region

பதிவு செய்யப்பட்ட தீர்வாக அலுவலகம் : 3/137, சாலாமேடு, விழுப்புரம்-605 602. பெட்டி எண்.56
Registered & Administrative office : 3/137, Salamedu, Villupuram - 605 602. Post Box No. 56
தொலைபேசி /Phone : 04146 259256-260 (5 லைன்) தந்தி : பெரியார், பேக்ஸ் /Fax : 04146-259399
Grams : "PERIYAR" E-mail : tnstcvpm@satyam.net.in / tnstcvpm@dataone.in

ANNEXURE 4.12

POLICE DEPARTMENT

From

P.K.Senthilkumari IPS.,
Superintendent of Police,
Vellore District,
Vellore.

To

Tr. Vinoth Ramanarayanan,
Consultant, Vellore Smart City,
Office of the Commissioner,
Vellore City, Municipal Corporation,
Vellore.

RC.No.J.2(2)/56857/2015, Dated 16.12.2015

Sir,

Sub: Police - Vellore District - Vellore City Corporation - Shortlisted to participate in the Smart Cities - Proposed Smart City Plan- Detailed Components discussed under the Chairmanship of the Collector, Vellore - Letter for Supporting to take forward the action on the proposed project submitted - Reg.

Ref: 1. Your email. Dated: 10.12.2015

@@@@

I invite your attention to the reference cited. I wish to state that as per the Detailed Components discussed during Consultations held under the Chairmanship of the Collector, Vellore on 09.12.2015 regarding Vellore City Corporation has been shortlisted to participate in the Smart Cities. Challenge initiative of the Ministry of Urban Development, in this regard I have submitting the support towards co-ordinating and delivering the plan for the City and Area based initiatives under the Smart City Mission in Vellore City Municipal Corporation.

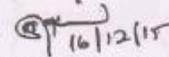
2) Further I wish to state that it's most inevitable that the Vellore City Municipal Corporation has been shortlisted to participate in the Smart City project. As part of the Smart City initiative, we hope to undertake a host of projects under plan city and Area based Components. We know that the following projects fall under the ambit of Police Department and we will be given our Support to the newly set up Special purpose Vehicle in facilitating the required Smart City Components and all other inputs.

Components under the ambit of Police Department

Projects / Activities planned:

1. Tracking the exact bus location of both feeder and arterial Transportation systems.
2. Traffic Surveillance and Wireless monitoring.
3. Decongesting traffic through re-routing all commercial freight vehicles and inter-city buses through green - circle and Abdullahpuram to the new Bus stand.
4. Registration of all Auto stands and Autos and regularization of fee through mobile based apps.
5. Express emergency response number and mobile APP, backend IT infrastructure and handheld devices to all emergency response units, Surveillance Camera in all important roads of the City, Commercial Area, and market areas in the City and other Components.

Yours faithfully,

 16/12/15

Superintendent of Police,
Vellore District, Vellore.


14/12

ANNEXURE 4.13

Preliminary Human Resource Plan

In order to run the City level SPV and manage smooth execution of projects identified under the Smart City Proposal, the city would require additional human resources that have the skill sets and hands on experience. It is also expected that the City level SPV would be a lean organization with only critical staff on its pay roll. Further, a detailed Human Resource Plan would be prepared at a later stage that would lay out the profiles, qualifications and timelines for engagement of the resources. A preliminary Human Resource Plan is presented below:

1. SPV Board

Sl. No.	Board Member	Designation	Organisation /Institution	Functions	Remarks
1	Chairperson	Director	Director of Municipal Administration, GoTN	<ul style="list-style-type: none"> ▪ To preside over the activities of the Board and provide strategic inputs from time to time 	<ul style="list-style-type: none"> ▪ By Designation ▪ Tenure as per Indian Companies Act 2013 ▪ Requirement: Immediate
2	Director	Representative	Finance Department, GoTN	<ul style="list-style-type: none"> ▪ To participate in Board Meetings and take stock of the affairs of the company 	<ul style="list-style-type: none"> ▪ By Designation ▪ Tenure as per Indian Companies Act 2013 ▪ Requirement: Immediate
3	Director	Representative of the Government of India	Ministry of Urban Development, GOI		<ul style="list-style-type: none"> ▪ Appointed by MoUD ▪ Tenure as per Indian Companies Act 2013 ▪ Requirement: Immediate
4	Director	Commissioner,	Vellore City Municipal Corporation		<ul style="list-style-type: none"> ▪ By Designation ▪ Tenure: Full time ▪ Requirement

Sl. No.	Board Member	Designation	Organisation /Institution	Functions	Remarks
					nt: Immediate
5	Director	Chief Executive Officer	To be Identified		<ul style="list-style-type: none"> ▪ By Designation ▪ Tenure as per Indian Companies Act 2013 ▪ Requirement: Immediate
6	Independent Director(s)	Director	To be identified	<ul style="list-style-type: none"> ▪ To provide industry perspective and sectoral expertise on strategic decisions of the Board 	<ul style="list-style-type: none"> ▪ By name ▪ Selected from Data Bank maintained by MCA ▪ Preference would be given to those who have served as Independent Directors in the Board of Companies fulfilling Clause 49 of the listing agreement of SEBI. ▪ Tenure as per Indian Companies Act 2013 ▪ Requirement: Medium Term

2. CEO, SPV

Responsibility	Qualification	Tenure and Appointment
----------------	---------------	------------------------

<ul style="list-style-type: none"> ▪ Overseeing and managing the general conduct of the day-to-day operations of the SPV subject to the supervision and control of the Board ▪ Entering into contracts or arrangements for and on behalf of the Company in all matters within the ordinary course of the Company's business ▪ To formulate and submit to the Board of Directors for approval a Human Resource Policy that will lay down procedures for creation of staff positions, qualifications of staff, recruitment procedures, compensation and termination procedures ▪ Recruitment and removal of the senior management of the Company and the creation of new positions in accordance with the Company's approved budget and the recruitment or increase of employees in accordance with the Human Resource Policy laid down by the Board ▪ Supervising the work of all employees and managers of the Company and the determination of their duties, responsibilities and authority. 	<ul style="list-style-type: none"> ▪ Over ten years of experience in running and managing infrastructure companies as Chief Executive Officer/Managing Director ▪ Experience in implementing and running day-to-day operations of large infrastructure projects preferably in the urban sector ▪ Should have experience in setting up SPVs ▪ Should have experience in raising finances including from the bond market ▪ Experience in working with Government would be preferred 	<ul style="list-style-type: none"> ▪ Appointment for a period of <i>three</i> years with the approval of MoUD ▪ Will be selected and appointed through a competitive process from the market ▪ Requirement: Medium
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3. Chief Vigilance Officer

Responsibility	Qualification	Tenure and Appointment
<ul style="list-style-type: none"> ▪ Preventive and surveillance vigilance ▪ Flagging cases to the SPV Board ▪ Conveying Government Instructions on vigilance to all divisions for compliance ▪ Vigilance clearance in certain service aspects ▪ Handling Departmental Vigilance Cases 	<ul style="list-style-type: none"> ▪ The officers should be holding JS/ IG/ DIRECTOR/DIG / DS level posts in Central/State level Departments/Agencies 	<ul style="list-style-type: none"> ▪ Will be appointed by the Board of the City level SPV ▪ Initial Deputation for a period of three years extendable up to a further period of two years. ▪ Requirement: Medium

4. Core Team

It is proposed that the SPV would have four verticals – Planning, Projects, Finance and Administration that would seamlessly operate towards managing the projects identified under the Smart City Proposal.

Sl. No.	Designation	Qualification	Job Description	Hiring Plan ¹	Remarks
1.	Head, Planning	<ul style="list-style-type: none"> ▪ Master's degree in Urban/Regional Planning or equivalent ▪ 15 or more years of experience in assisting city governments in planning of infrastructure/service delivery projects like water supply, transportation, etc. 	<ul style="list-style-type: none"> ▪ Overall responsibility planning the various smart city projects in line with the Smart City Plan ▪ Work closely with the CEO and other Government Agencies for implementation of the Smart City Plan 	Long Term	Tenure: Full time
2.	Chief Financial Officer	<ul style="list-style-type: none"> ▪ Chartered Accountant/PG in Finance or equivalent with over fifteen years of experience ▪ More than ten years experience as Head, Finance in large infrastructure /construction companies 	<ul style="list-style-type: none"> ▪ Identification of potential sources of raising funds ▪ Discussions with Lenders, Finalisation of Term Sheet / Financing Documents. ▪ Negotiation at senior level with potential financiers and investors and identifying avenues for funding 	Long Term	Tenure: Full time
3.	Head, Projects	<ul style="list-style-type: none"> ▪ Post Graduation in Civil Engineering or equivalent from reputed academic institutes with good academic record ▪ More than ten years of experience as Head, Projects in large infrastructure/construction companies ▪ Experience of implementing and managing projects in urban sectors would be preferred 	<ul style="list-style-type: none"> ▪ Developing guidelines, protocols, structures and standard operating procedures for project financing under various Public Private Partnership (PPP) models ▪ Advise CEO on strategic matters related to identified projects (feasibility, finance, policy etc) ▪ Building financial models and analysis (profitability indicators, projections, scenarios, etc.). for evaluating financial feasibility of new projects as well as existing infrastructure projects ▪ Preparing optimal commercial structure and institutional framework design for various 	Long Term	Tenure: Full time

¹ Immediate: 0 to 3 months; Medium: 3 to 6 months; Long Term: After 6 months

Sl. No.	Designation	Qualification	Job Description	Hiring Plan ¹	Remarks
			<p>infrastructure projects</p> <ul style="list-style-type: none"> Preparation of project monitoring and governance frameworks 		
4.	Smart City Planner	<ul style="list-style-type: none"> Master's Degree in Urban Planning or equivalent from reputed academic institutes with good academic record More than seven years of experience in Urban Planning / City Planning / Country Planning / Town Planning / Regional Planning / Infrastructure Planning / Transport Planning / Environmental Planning) Experience in assisting city governments in innovating planning solutions like land use, transit oriented development, sustainable environmental planning etc 	<ul style="list-style-type: none"> Reviewing of smart city projects from urban planning perspective Provide technical expertise in procurement of smart city solutions Ensure compliance with various development plans and strategies identified for the city Ensure regulatory compliance of projects as per existing policies, FSI, land use among others 	Long Term	Tenure: Full time
5.	Citizen Engagement Expert	<ul style="list-style-type: none"> Post Graduation on Mass Communication/Social Work or equivalent from reputed academic institutes More than ten years of experience in formulation and implementation of strategies for engagement with citizens/civil society Experience of working with City Governments would be preferred 	<ul style="list-style-type: none"> Formulation of Citizen Engagement Strategy covering life cycle of projects Convening meeting with the Smart City Citizen Forum Advise on matters pertaining to managing citizen's expectations 	Long Term	Tenure: Full time
6.	Information Technology Expert	<ul style="list-style-type: none"> Post Graduation in Engineering (IT/Computer Science) or equivalent More than 15 years of experience in developing and implementing smart solutions related to public service delivery Experience in developing mobile applications/ dashboards etc. 	<ul style="list-style-type: none"> Review of technological aspects presented in Project feasibility studies Provide advise on technological matter as and when required 	Long Term	Tenure: Full time
7.	Technology Expert	<ul style="list-style-type: none"> Post Graduation in Engineering or equivalent More than 15 years of 	<ul style="list-style-type: none"> Assessment of feasibility, reliability and sustainability including 	Long Term	Tenure: Full time

Sl. No.	Designation	Qualification	Job Description	Hiring Plan ¹	Remarks
		<p>experience in implementation and management of technology intensive projects in the urban projects (preferable international projects)</p> <ul style="list-style-type: none"> ▪ Knowledge and understanding of latest technological developments in the SWM, Sanitation, Water Supply, Septage etc. 	<p>cost aspects of technologies suggested for different projects</p> <ul style="list-style-type: none"> ▪ Suggestion of appropriate technologies for different projects as and when required 		
8.	Transportation and Road Safety Expert	<ul style="list-style-type: none"> ▪ Graduation in Civil/Mechanical/Automobile Engineering with Post graduate qualification in Mechanical/Transportation/Highway Engineering. ▪ More than 15 years of experience in Road Safety management and coordination activities ▪ Knowledge of road safety standards as per national/international guidelines 	<ul style="list-style-type: none"> ▪ Review of road safety aspects in all transportation and road projects ▪ Provide advise on safety aspects as and when required 	Long Term	Tenure: Contractual
9.	Relief & Rehabilitation Officer	<ul style="list-style-type: none"> ▪ More than 15 years of experience in Relief and Rehabilitation works preferably in the urban sector ▪ Knowledge of implementation of resettlement and rehabilitation programmes as per the provisions of Right to Fair Compensation and Transparency in Land Acquisitions, Rehabilitation and Resettlement Act, 2013 through periodic monitoring ▪ Knowledge of national and State guidelines, policies, and Acts on land acquisition, rehabilitation and resettlement. ▪ Full time First Class Degree in Civil Engineering/ Full time First class Master's Degree in Social Work or Social Sciences 	<ul style="list-style-type: none"> ▪ Preparation of social impact assessment, planning/implementation of resettlement and rehabilitation activities ▪ Advise on R&R matters for infrastructure projects and services ▪ Estimation of R&R Costs for project components ▪ Review of project documents prepared by consultations 	Long Term	Tenure: Full time
10.	Heritage Conservation	<ul style="list-style-type: none"> ▪ At least Post Graduation in Heritage and Tourism 	<ul style="list-style-type: none"> ▪ Designing and implementation of 	Medium Term	Tenure: Contractual

Sl. No.	Designation	Qualification	Job Description	Hiring Plan ¹	Remarks
	Expert	<p>Management, Planning or Architecture/Conservation</p> <ul style="list-style-type: none"> ▪ More than 20 years of experience in planning, implementation and management of conservation projects/programmes at national/international level ▪ Experience in spatial analysis, zonal/development plans, heritage conservation and assistance in integration of projects at city/region area level ▪ Expertise in integrated tourism planning and tourism infrastructure, development and management ▪ Experience of working with the Government at the national, state or local level 	<p>tourism/heritage conservation specific projects, sub-projects and activities</p> <ul style="list-style-type: none"> ▪ Advise on commercial utilization of spaces in heritage sites identified in the plan ▪ Advise on relaxation of municipal bye-laws for preservation and better management of heritage areas ▪ Work closely with the Head, projects and Chief Planner in overall planning and implementation of the identified projects 		
11.	Senior Economist	<ul style="list-style-type: none"> ▪ Doctorate/ Post Graduation in Economics ▪ More than 15 years of experience in infrastructure projects ▪ Experience of working with large PSU/Infrastructure Companies 	<ul style="list-style-type: none"> ▪ Undertake a detailed economic and financial analysis of projects in accordance with relevant guidelines ▪ Advise on creation of economic opportunities at the city level 	Long Term	Tenure: Full time
12.	Data Scientist	<ul style="list-style-type: none"> ▪ More than 10 years of experience in data analysis ▪ More than 7 years of experience in design and development of data infrastructure and data management ▪ Experience in Big data would be preferred ▪ Post graduate degree in Statistics/Economics/Econometrics from a reputed institute 	<ul style="list-style-type: none"> ▪ Overall data collation and analysis ▪ Design of database management structure ▪ Design of data collection templates for different projects and services 	Long Term	Tenure: Full time
13.	Senior Manager, Finance	<ul style="list-style-type: none"> ▪ Should be Chartered Accountant/ M.B.A. Finance/ M.Com/ICFAI or equivalent from a recognized University/Institute with good academic record 	<ul style="list-style-type: none"> ▪ Work Closely with the CFO in managing Financial Operation of the Projects ▪ Preparation project financial status on monthly/quarterly basis 	Long Term	Tenure: Full time

Sl. No.	Designation	Qualification	Job Description	Hiring Plan ¹	Remarks
14.	Legal Officer	<ul style="list-style-type: none"> ▪ Post Graduation degree in law or equivalent from reputed academic institutions ▪ More than ten years of experience in formulation and drafting of internal policies 	<ul style="list-style-type: none"> ▪ Formulation and drafting of internal policies – Human Resource, Risk Management, ▪ Review and vetting of all legal documents ▪ Representation of company in legal matters 	Long Term	Tenure: Full time
15.	Compliance Officer/Company Secretary	<ul style="list-style-type: none"> ▪ A demonstrated background within a compliance, audit or legal field (preferably in a related industry such as financial services or an advisory business) ▪ Company Secretary / Chartered Accountant with more than fifteen years of experience ▪ More than ten years of experience as Head, Compliance in large infrastructure/construction companies 	<ul style="list-style-type: none"> ▪ Ensuring regulatory compliance as per the Indian Companies Act 2013 and other acts ▪ Monitoring and maintaining compliance calendars, checklists, registers and associated documents ▪ Liaising with internal and external stakeholders including employees, clients, custodians, lawyers and auditors and dealing with information requests ▪ Providing advice on compliance issues associated to the SPV ▪ Managing all special purpose vehicle matters, including register updates and maintenance ▪ General filing, record keeping and other ad-hoc administrative tasks as required 	Long Term	Tenure: Full time
16.	Accounts Officer	<ul style="list-style-type: none"> ▪ Should be Chartered Accountant/ M.B.A. Finance/ M.Com/ICFAI or equivalent from a recognized University/Institute with good academic record ▪ More than five years of experience in managing accounts/finance in large infrastructure/construction companies 	<ul style="list-style-type: none"> ▪ Assistance in preparation of financial statements of the SPV ▪ Regular Maintaining of SPV accounts ▪ Flagging issues pertaining to finance 	Long Term	Tenure: Full time

Sl. No.	Designation	Qualification	Job Description	Hiring Plan ¹	Remarks
17.	Procurement Officer	<ul style="list-style-type: none"> ▪ More than 15 years of experience in handling procurements of large infrastructure projects/services preferably in urban sector ▪ At least ten years of experience in review and drafting of tender documents including contracts/concession agreement ▪ Experience in assisting Government agencies in transaction advisory services ▪ Robust understanding of legal framework and procurement laws in Tamil Nadu/Multi-lateral/Bi-lateral agencies ▪ Post Graduate Degree in Law from recognised Institute with good academic record 	<ul style="list-style-type: none"> ▪ Review and drafting of tender documents ▪ Review of project documents from policy/legal perspective ▪ Procurement of vendors/financiers/Partners ▪ Assistance in procurement matters 	Medium Term	Tenure: Full time
18.	Internal Auditor	<ul style="list-style-type: none"> ▪ More than 15 years of experience in undertaking financial audit in large infrastructure/construction companies ▪ Chartered Accountant from ICAI 	<ul style="list-style-type: none"> ▪ Undertaking internal audit of the financials 	Medium Term	Tenure: Full Time
19.	Chief Administrative Officer	<ul style="list-style-type: none"> ▪ More than 15 years of experience in general administration of PSU/large infrastructure organization ▪ Post Graduate Degree in Management/M.B.A with good academic record 	<ul style="list-style-type: none"> ▪ Overall in-charge of administrative functions, responsible to Board/CEO ▪ Performance Management and grievance handling ▪ Preparation of the Annual Report of the SPV ▪ Assessment of Administrative Support requirements on a regular basis 	Medium Term	Tenure: Full time
20.	Project Finance Team (2 Nos.)	<ul style="list-style-type: none"> ▪ Should be Chartered Accountant/ M.B.A. Finance/ M.Com/ICFAI or equivalent from a recognized University/Institute with good academic record ▪ Minimum two years of experience in project finance including raising of finance from the market 	<ul style="list-style-type: none"> ▪ Assistance in preparation of investment proposals ▪ Compliances for the Financing Agreements, other requirements, Other agreements BG, LC, BC etc. ▪ Carrying out risk assessments and 	Long Term	Tenure: Full time consultancy support model Tenure: Initially for a period of two years

Sl. No.	Designation	Qualification	Job Description	Hiring Plan ¹	Remarks
		<ul style="list-style-type: none"> ▪ Experience of working in large infrastructure / construction companies 	mitigation strategy		with the provision for extension by one more year.
21.	Project Appraisal Team (3-4 Nos.)	<ul style="list-style-type: none"> ▪ Post Graduate in Finance/Commerce/Economics/Management or Chartered Accountant ▪ Experience in scrutiny and appraisal of technical documents such as feasibility studies, DPRs, technical designs, financial documents such as cash flow statements, legal documents such as Tender Acts, Tender documents – RFP, Concession Agreement etc. 	<ul style="list-style-type: none"> ▪ Review and scrutiny of project preparatory and tender documents ▪ Preparation of Observation Notes for CEO for update and decision making ▪ Review of policy, acts, guidelines ▪ Provide support to the City Government/SPV ▪ Undertake secondary and primary research as required 	Long Term	<p>Tenure: Full time consultancy support model</p> <p>Tenure: Initially for a period of two years with the provision for extension by one more year.</p>