



Saharanpur Smart City

SAHARANPUR CITY'S STRENGTH-

- Strong economic base of wood carving
- Supply center for agro based industries
- Center for research, skill development and vocational institutions for strong industrial base

CITIZEN OPINION AND ENGAGEMENT-

Citizens were informed about the 24 Smart City Features as provided in the guidelines provided by MoUD and accordingly, questionnaire and discussions were formulated for citizen engagement.

Based on the responses received (on-line and off-line combined) major concerns identified out of 100% are:

1. Sanitation & Sewerage	(14%)
2. Roads	(12%)
3. Solid Waste Management	(10%)
4. Traffic/transport system	(10%)
5. Economy	(10%)
6. Water Supply	(9%)
7. E-governance	(7%)
8. Green Space	(7%)
9. Education	(6%)
10. Power Supply	(6%)
11. Safety & security	(5%)
12. Health	(5%)

VISION, GOALS AND SUB-GOALS OF SAHARANPUR SMART CITY-

“Saharanpur envisions to improve quality of life and leverage economies of Wooden Handicraft & Agro Industries”

► REVAMPING THE MULTIPLE ECONOMIC BASES:

- Expansion of existing Common Facility Centre of wooden handicrafts with Tools, Machinery and equipments along with Incubation Centre for wooden handicrafts carving to enhance skills and employment generation.
- WOOD CITY SAHART APP & Website for facilitating trade of wooden handicrafts for ease of business and online marketing.
- Development of cold storage & food processing unit at Mandi Samiti with logistic reinforcement with Dedicated Eastern Freight Corridor to facilitate supply and reduce organic wastages.
- Commercial Shopping & Office Complex with Multilevel Parking at Delhi Bus Depot as per the citizen's requirements.

► IMPROVING QUALITY OF LIFE:

- SAHART Sewerage & Sanitations
- SAHART Solid Waste Management
- SAHART Transport-Walkability
- SAHART Safety and Security
- SAHART Water Supply and Reuse of Recycled Water
- SAHART Power Supply, Source and efficiency
- SAHART ROBUST INFRASTRUCTURE
- SAHART Public Open Spaces & Paondhoi River Rejuvenation.
- SAHART Healthcare & Education
- SAHART Responsive Governance (ABD)
- Smart Traffic Management
- SAHART Responsive Governance (PAN City)

► **Description of the selected area for Area Based Development/Pan City:**

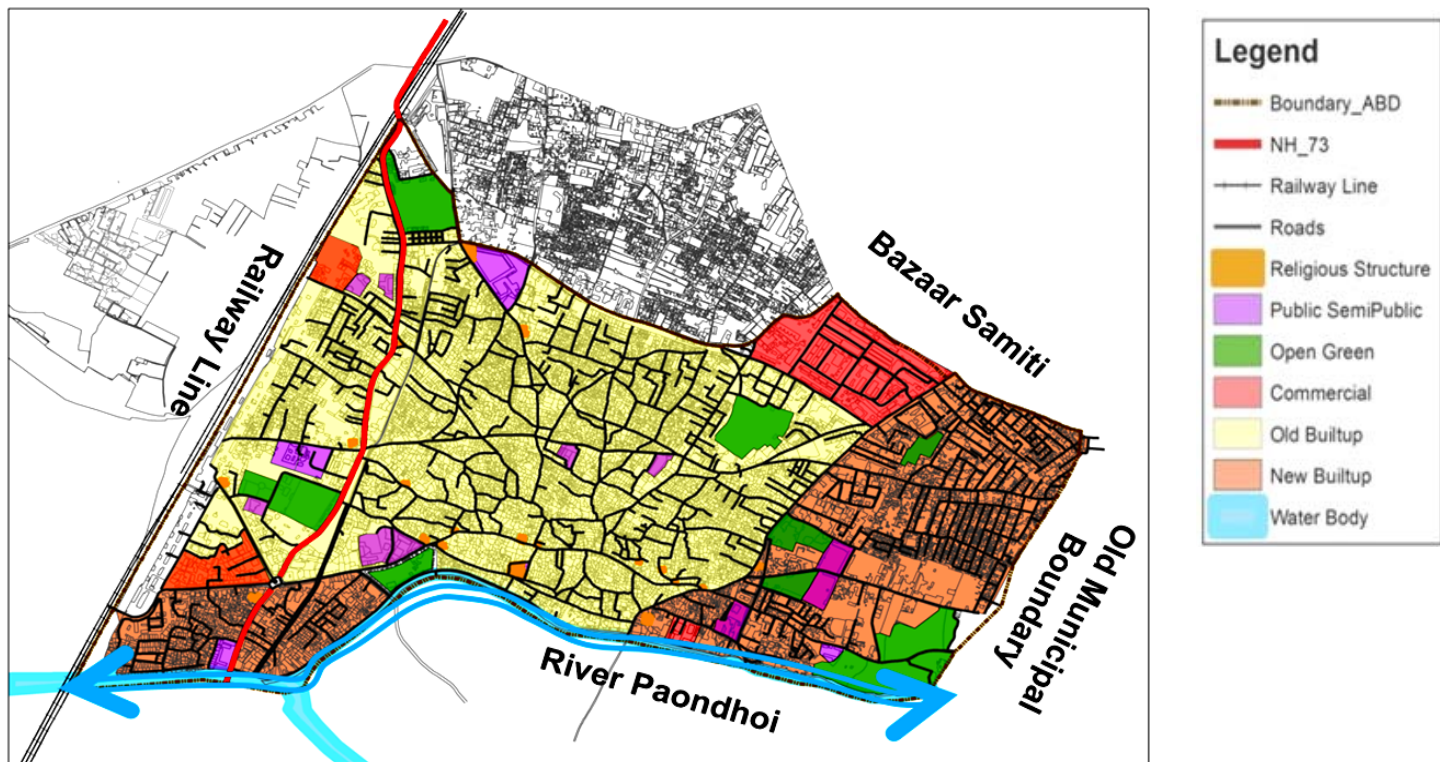
The component wise costs of **Area Based Proposals** are given below:

S.No	Project Head	Smart City (Cr.)	PPP (Cr.)	Convergence (Cr.)	Total Project Cost (Cr.)
1.	SAHART Multiple Economies	83.00	208.00	0.00	291.00
2.	SAHART Sewerage & Sanitations	145.70	9.45	17.15	172.30
3.	SAHART Solid Waste Management	27.95	11.60	30.00	69.55
4.	SAHART Transport-Walkability	111.10	34.00	0.00	145.10
5.	SAHART Safety and Security	5.50	0.00	0.00	5.50
6.	SAHART Water Supply Improvement	59.74	0.00	9.76	69.50
7.	SAHART Power Supply Strengthening	50.57	0.00	9.46	60.03
8.	SAHART Robust Infrastructure	281.00	0.00	21.00	302.00
9.	SAHART Public Open Spaces Development	39.70	71.35	0.00	111.05
10.	SAHART Healthcare & Education	1.50	0.00	0.00	1.50
11.	SAHART Responsive Governance	10.00	45.60	0.00	55.60
Total ABD Project Cost (Cr.)		816.00	380.00	87.00	1283.13

The component wise cost of **Pan City proposals** are given below:

12.	SAHART Transportation & Traffic Mgt.	27.00	19.00	0.00	46.00
13.	SAHART Governance Management System	112.00	18.00	36.25	166.25
Total PAN City Smart Solution Cost (Cr.)		139.00	37.00	36.00	212.25

Out of total project cost of Rs. 1505 Cr, Rs. 965 Cr is taken from Smart City Mission fund, Rs 417 Cr will be used from PPP Project and Rs 124 Cr will be converged from various projects under government schemes.



Area selected for ABD (1,260 acre) is a combination of old city area along with relatively newly built area in northern part. It is also the central business district of the city which contains few government offices and a number of markets along with wood market.

The area is confined by **rivers Dhamola and Paondhoi in East, old municipal limit in North, Gote Shah Road in west and railway line in south**. The ABD area covers wards 11-12, 16-25, 33, 41, 42 and 57 with an estimated 20.2% of the city population.

CONVERGENCE			
S.No	Activity/ Component	Department/agency/ organization	Role/responsibility
1	<p>SAHART Multiple Economy Development</p> <ul style="list-style-type: none"> • Strengthening Common Facility Centre and development of Research and Design centre for wooden handicrafts with Tools, Machinery and equipments for wooden handicrafts carving • Development of cold storage & food processing unit at Mandi Samiti with logistic centre reinforcement with Dedicated Eastern Freight Corridor and railway station • Development of Commercial Shopping & Office Complex • Single Window Clearance system • Promotional activities for Wood carving activities on Local, National & International platform 	<ol style="list-style-type: none"> 1. SPV 2. SMC 3. Existing CFC under EPCH 4. Indian Industries Association, Saharanpur Chapter 5. Wood Craft Design and Development Association 6. PPP players for Commercial Complex development on PPP basis 	<p>SPV:(a) Contractual arrangement with all members of projects, execution of works; (b) procurement of machine and tools; (c) Preparation of reports, obtaining approvals, tendering; (d) Responsible for execution of projects; SMC: Overall Coordination and land facilitation. IIA: Imparting Training in association with CFC & EPCH. EPCH: Promotional activity for Wood carving products PPP Player: Development of commercial complex</p>
2	<p>SAHART Sewerage & Sanitations:</p> <ul style="list-style-type: none"> • Strengthening Sewerage Network •Provision of SCADA monitoring •Automatic sewer cleaning machine •Fecal Sludge Management System and Novation of FSTPs •Development of Solar based Smart Public Toilets <p>SAHART Solid Waste Management</p> <ul style="list-style-type: none"> •Sensor based garbage bins •GPS installed vehicles •Bio-composting plant •Household bins for waste segregation •Compactors for Garbage transportation •Land for Disposal of Solid •Development of database of Workers 	<ol style="list-style-type: none"> 1. SPV 2. SMC 3. Jal Nigam 4. PPP players for Public toilets development on advertisement space t 5. PPP players for Bio-Composting plant 	<p>SPV: (a) Contractual arrangements with SMC, Jal Nigam & PPP players for execution of works; (b) Preparation of reports, approvals, tendering; (c) Responsible for execution of projects with support from resource partner Jal Nigam, (d) User charge collection from Public and community toilets SMC: Overall Coordination, approval facilitation and operation maintenance & land. PPP Players: Development, Operation, maintenance & revenue share of PPP projects.</p>
3	<p>SAHART Transport-Walkability</p> <ul style="list-style-type: none"> • Development of Internal Roads, strengthening, widening and beautification • Junctions Improvement • Development of Pedestrian Infrastructure • Development of Smart ON & OFF street • Parking along Railway station Road, Mandi Samiti Road & over Paondo River • Smart Underground & Multilevel parking • Development of Parking Management system 	<ol style="list-style-type: none"> 1. SPV 2. SMC, Works department 3. UPPWD 4. Other departments involved in road construction 5. PPP players for On& Off Street, Multilevel parking and Underground parking development 	<p>SPV: (a) Contractual arrangements with SMC& PPP Players for execution of works; (b) Preparation of reports, obtaining approvals, tendering; (c) Responsible for execution of projects with support from UPPWD and other departments involved in road construction; SMC: Overall Coordination, facilitation of approval and operation and maintenance. PPP Player: Develop, operate, maintain & revenue share to SPV</p>

4	<p>SAHART Safety and Security• Installation of CCTV camera with night vision• Traffic Police booths for safety & Security• Variable sensors for pedestrian/ traffic countSAHART Water Supply Improvement• Development of feeder mains and Water Distribution Network• Provision of Smart Consumer Water Meterswith SCADA based monitoring• Automated online water quality Monitoring System for the distribution network• Geo-Thermal Imaging Leak detectors• Rain Water Harvesting• Ground Water Recharging</p>	<ol style="list-style-type: none"> 1. SPV 2. UP Police 3. SMC 4. Jal Nigam 5. SDA/DUDA 	<p>SPV: (a) (a) Contractual arrangements with SMC, UP Police, Jal Nigam &SDA/DUDA for works;(b) Preparation of reports, obtaining approvals, tendering;SMC : Overall Coordination, operation and maintenance ofWater supply projectsUP Police: Support in CCTV installation, Police booth.SMC: Variable SensorsSDA/DUDA :Rain water harvesting, Ground recharge projects</p>
5	<p>SAHART Power Supply Strengthening</p> <ul style="list-style-type: none"> • Smart Components in Power Sub-stations • Smart Distribution Network with sensors • Smart Consumer Metering • Solar Power Rooftop Installations • Solar High Mast Light at five Junctions <p>SAHART ROBUST INFRASTRUCTURE</p> <ul style="list-style-type: none"> • Robust retrofitting of Old city area • Underground Utility Duct with Sensors • Development of facilities for Urban Poor (with 2 Raen Basera-night shelters at Delhi bus stop & Government Hospital & 1 Old age home) 	<ol style="list-style-type: none"> 1. SPV 2. SMC 3. PVVNL 4. UPNEDA 5. PWD 6. JAL NIGAM 7. DUDA 	<p>SPV: (a) Contracts with SMC, PVVNL, UPNEDA, PWD & Jal Nigam for project execution (b) Procurement & implementation of the project. PVVNL for power related projects, O&M & Monitoring SMC: (a) Providing RoW and approval for Utility duct; DUDA: Development of Raen Basera, Nigh shelters PWD & Jal Nigam- Retrofitting & Utility duct UPNEDA: Solar Rooftop & Solar High Mast lights with the help of SMC</p>
6	<p>SAHART Public Open Spaces Development</p> <ul style="list-style-type: none"> • Revitalization of Paondhoi River • Vending zones development in ABD area • Rejuvenation of parks in ABD area • Urban forestry and Landscaping • Mega Park development <p>SAHART Healthcare & Education</p> <ul style="list-style-type: none"> • First-aid centres for quick medical facility • Mobile clinic & Telemedicine facility • Smart E-library & career counselling centre (at existing municipal library) 	<ol style="list-style-type: none"> 1. SPV 2. SMC 3. Directorate of Health/Medigram 4. UPPHED 5. DoT &E, GoUP 6. PPP Player for Vending Zone 7.PPP Player for Mega Park Development 8. BSNL 	<p>SPV: Contracts with SMC, UPPHED, DoT &E, BSNL and PPP players Directorate of Health/ Medigram - Operation and maintenance of First Aid Centre and Mobile clinic & Tele-medicine services SMC: Overall Coordination, approval facilitation and operation maintenance. DoT &E: Career Counselling activity, O&M. PPP players for Vending Zones & Mega Park Development & Revenue share</p>
7	<p>SAHART Responsive Governance</p> <ul style="list-style-type: none"> • Wi-fi Hotspots for Internet facilityCapacity building programs of SMC officer for efficient management of ICT based infrastructure and new technology • Training and Orientation for citizens (video tutorials clips on SAHARAT App for training & guidance) • Environment Monitoring Stations • Development of Solar based Fresh Drinking water kiosks 	<ol style="list-style-type: none"> 1. SPV 2. SMC 3.BSNL 4. DoT &E, GoUP 5. UPPCB 6. PPP Player for Fresh Water Kiosks 	<p>SPV: Contracts with BSNL, DoT &E, UPPCB & PPP Players for execution of works.SMC: Support UPPCB to establish EnvironmentMonitoring station & Operation SMC: Support PPP player todevelop fresh water kiosks, operate, maintain & share revenue to SPVDoT&E: Training to citizen BSNL: WIFI hotspotdevelopment, operate, maintain& share revenuePPP: Water Kiosks</p>

8	<p>SAHART Transportation & Traffic Management (PAN CITY Solution)</p> <ul style="list-style-type: none"> • Smart Traffic Management System • Variable Message Sign Boards • Development of Corridors and Routes for last mile connectivity • Automatic Traffic Violation Deduction Camera • E-rickshaws registrations, route regularization • Pre-paid booth at e-rickshaws parking places and fleet development • E-rickshaws parking facility with solar based charging system 	<ol style="list-style-type: none"> 1. SPV 2. RTO 3. Traffic Police 4. E-Rickshaw Associations 5. PPP Player for E-Rickshaw based transit system development 6. PPP player for Variable Sign Boards using as advertisement 	<p>SPV: Develop City based traffic management system with the support of traffic police & RTO: (a) Overall Coordination; (b) project preparation and implementation. PPP player: Variable message sign boards PPP player for E-Rickshaw based city transit system development, operation & revenue sharing Traffic police: Operation & monitoring ITMS</p>
9	<p>SAHART Governance Management System (SGMS)</p> <ul style="list-style-type: none"> • SAHART Command and Control Centre - ICT enabled Integrated system for city enhanced service delivery and monitoring • CCTV surveillance system (CCTV cameras at each entry point of city, major nodes, public spaces, parks and integration with Command & Control Centre • SAHART CITY app development for advanced Grievance Redressal System with integrated city services • Departmental Database Digitization and Integration 	<ol style="list-style-type: none"> 1. SPV 2. SMC 3. Traffic Police 4. RTO 5. BSL 6. UP Police 7. App Developer <p>All parastatal departments and organizations</p>	<p>SPV: (a) Procurement of hardware & software requirements; (b) Procurement & implementation of the project; with the help of traffic police, UP police & SMC. SMC: (a) Integrating the municipal services to common payments and service platform; (b) property tax collection. App Developer: Development of SAHART App & Website with integrated citizen services UP Police: Installation of CCTV camera, operation and Maintenance with SPV support</p>
10	<p>Development of Property & Utility</p> <ul style="list-style-type: none"> Details using GIS based Mapping • LED Street Lights (Sensible Street Lighting) • ICT support to Solid Waste Collection for improved efficiency and monitoring of collection, transportation and disposal • SCADA based online monitoring for existing Tube wells 	<ol style="list-style-type: none"> 1. SPV 2. SMC 3. Jal Nigam 4. UP Police 	<p>SPV: (a) Procurement of hardware & software requirements; (b) Procurement & implementation of the project; (c). ICT component in all projects SMC: (a) LED based lights project ; (b)GIS based mapping for property tax collection, (c) ICT component in solid waste collection using SPV support Jal Nigam: SCADA system for monitoring using support from SPV.</p>

PPP			
S. No	Activity/ Component	Company/corporation/ organization	Role/responsibility (basic TOR)
1	<p>Enhancing Economic Growth</p> <ul style="list-style-type: none"> • Development of cold storage & food processing unit at Mandi Samiti with logistic centre reinforcement with Dedicated Eastern Freight Corridor and railway station • Commercial Shopping & office Complex with underground parking facility at Old Bus Depot 	<ul style="list-style-type: none"> • Private partners • Food Processing Companies • Private developers • Local developers 	<ul style="list-style-type: none"> • Design and approval of Cold Storage facility which can fulfil the demand of sabzi mandi • Development of cold storage facility as per TOR; • Operate, maintain and revenue generation with the support of Mandi Samiti & SPV. • Handing over the units under SPV's share on the basis as per contract; • Operation and Maintenance as per mutually agreed terms and conditions.

2	<p>Enhancing Economic Growth</p> <ul style="list-style-type: none"> Commercial Shopping & office Complex with underground parking facility at Old Bus Depo 	<ul style="list-style-type: none"> Private contractor/ developer Real Estate Developers Local contractors/Private Developers of commercial complex NGO's such as Samarpan, Muskaan which are already working in Saharanpur for management of Solid Waste 	<ul style="list-style-type: none"> Design and approval Development of area as per approved design; Sale of units falling in developer's share; Handing over the units under SPV's share on the basis as per contract; Operation and Maintenance as per mutually agreed terms and conditions.
3	<p>SAHART Sewerage & Sanitations</p> <ul style="list-style-type: none"> Construction of Smart Public Toilets 	<p>Advertisement Agencies/NGOs</p> <ul style="list-style-type: none"> Add Agencies Local News papers Local NGO such as Samarpan, Muskaan which are already working in Saharanpur 	<ul style="list-style-type: none"> Developer/agency will build & operate public toilets. Utilize the toilets as advertisement space. Generate the revenue and share it with SPV with maintenance and O&M cost
4	<p>SAHART Solid Waste Management</p> <ul style="list-style-type: none"> Bio-composting in Sabzi Mandi & wood carving areas to decompose the horticulture and wood waste. Waste to Compost Plant at village Battanwala, Dehradun Road 	<ul style="list-style-type: none"> Private contractor/ developer Local Natural fertilizer companies Solid Waste Management agencies Local NGOs 	<ul style="list-style-type: none"> Design and approval of facility Development of area as per approved design; Sale of compost to farmers and generate revenue and share the revenue as per the agreement to SPV; Handing over the units under SPV's share on the basis as per contract; Operation and Maintenance as per mutually agreed terms and conditions.
5	<p>SAHART Transport-Walkability</p> <p>Development of Smart ON & OFF street Parking along Railway station Road, Mandi Samiti Road and over Paondoil River</p>	<p>Local parking operators & NGOs under the supervision of SMC</p> <ul style="list-style-type: none"> Local NGOs, Local parking operators, Parking Infra developers & Agencies 	<ul style="list-style-type: none"> PPP based parking infrastructure developer will develop the multilevel parking with its own resources. PPP player will operate & maintain the facility based on contract and share the revenue with SPV. Transfer the facility after the contract period.
6	<p>SAHART Transport-Walkability</p> <p>Smart Underground & Multilevel parking at Jubilee Park & Old Bus Stand</p>	<p>Parking Infra developers & Agencies under the supervision of SMC</p> <ul style="list-style-type: none"> Private contractor, Parking Infra developers & Agencies Software development firm will also be appointed for developing and integrating smart parking management system 	<ul style="list-style-type: none"> PPP based parking infrastructure developer will develop the multilevel parking with its own resources. PPP player will operate & maintain the facility based on contract and share the revenue with SPV. Transfer the facility after the contract period.
7	<p>SAHART Public Open Spaces</p> <p>Development Vending zones development in ABD area</p>	<ul style="list-style-type: none"> Local NGOs, developers under supervision of SMC/SDA/DUDA Local NGOs/developers 	<ul style="list-style-type: none"> PPP based vending Infrastructure developer will develop the facility by its own resources. PPP player will operate & maintain the facility based on contract and share the revenue with SPV. Transfer the facility after the contract period.
8	<p>SAHART Public Open Spaces Development</p> <p>Mega Park development at Plot No. 355 KHA (1.342 hectare) at Sadak Dudhli, Dehradun Road</p>	<ul style="list-style-type: none"> Real Estate developers Local NGOs/developers Local Contractors/ Recreational Area Agencies 	<ul style="list-style-type: none"> PPP based vending Infrastructure developer will develop the facility by its own resources. PPP player will operate & maintain the facility based on contract and share the revenue with SPV. Transfer the facility after the contract period.

9	SAHART Responsive Governance <ul style="list-style-type: none"> • Wi-fi Hotspots for Internet facility • Development of Solar based Fresh Drinking water kiosks 	<ul style="list-style-type: none"> • IT Companies • Telecom companies • BSNL 	<ul style="list-style-type: none"> • PPP- Develop Internet service by creating Wi-fi zones in complete ABD area. • Facilitation of Internet services and collection of user charges • Operate and maintain the facility including O&M cost under the guidance of SPV
10	SAHART Transportation & Traffic Management <ul style="list-style-type: none"> • Variable Message Sign Boards: Digital Signalisation Special designed boards with smart features • Pre-paid booth at e-rickshaws parking places and fleet development for strengthening IT based city transit system • E-rickshaws parking facility with solar based charging system 	<ul style="list-style-type: none"> • PPP based bus operators under the supervision of UPSRTC & SPV • PPP players for City Transit System • Advertisement agencies/NGOs for Variable Sign Boards 	<ul style="list-style-type: none"> • Procurement of E-Rickshaw operation & maintenance of City bus by PPP player based on contract • Revenue share to SPV • RTO will monitor the facility. • O&M cost will be taken care by PPP Player • Pre-paid booths will be operated by PPP and maintenance will be done by PPP player
11	SAHART Governance Management System (SGMS) <ul style="list-style-type: none"> • Smart Digital Screen: Info/Social Messaging/Alerts/Smart Digital Advertisement 	<ul style="list-style-type: none"> • Advertisement Agencies/ Firms • Add Agencies • Local News papers 	<ul style="list-style-type: none"> • PPP player will develop the necessary infrastructure for digital advertisement, provide public related notices and information • Advertisement agency will build & operate, generate revenues by displaying the advertisements • Share the Revenue with SPV by operating, maintaining the facility including O&M cost.

SPV (Special Purpose Vehicle)-विशेष प्रयोजन साधन

भारत सरकार द्वारा स्मार्ट सिटी मिशन के अन्तर्गत जारी दिशा-निर्देशों के पैरा-10 के अनुसार मिशन के अन्तर्गत चयनित नगरों में प्रस्तावित कार्यों का क्रियान्वयन विशेष प्रयोजन साधन (SPV-Special Purpose Vehicle) के माध्यम से कराए जाने की व्यवस्था है। अतः स्मार्ट सिटी मिशन के अन्तर्गत जारी दिशा-निर्देशों के पैरा-10 के अनुसार प्रस्तावित कार्यों के क्रियान्वयन हेतु एतद्द्वारा निम्नानुसार SPV-Special Purpose Vehicle के गठन पर राज्यपाल महोदय सहर्ष स्वीकृति प्रदान करते हैं-

(1) लखनऊ, इलाहाबाद, कानपुर, वाराणसी, आगरा, मुरादाबाद, अलीगढ़, सहारनपुर, बरेली, झांसी, गाजियाबाद के लिए :

- | | | |
|--|---|--------------------------------|
| (1) संबंधित मण्डलायुक्त | - | अध्यक्ष |
| (2) भारत सरकार द्वारा नामित प्रतिनिधि | - | सदस्य |
| (3) उपाध्यक्ष, संबंधित विकास प्राधिकरण | - | सदस्य |
| (4) मुख्य अभियन्ता, सम्बन्धित विद्युत वितरण मण्डल | - | सदस्य |
| (5) सम्बन्धित मुख्य अभियन्ता, उ०प्र० जल निगम | - | सदस्य |
| (6) सहयुक्त नियोजक, नगर एवं ग्राम्य नियोजन विभाग | - | सदस्य |
| (7) निदेशक, क्षेत्रीय नगर एवं पर्यावरण अध्ययन केन्द्र, लखनऊ
अथवा उनके प्रतिनिधि | - | सदस्य |
| (8) मिशन निदेशक (स्मार्ट सिटी)/निदेशक, नगर निकाय द्वारा नामित प्रतिनिधि | - | सदस्य |
| (9) संबंधित नगर आयुक्त, नगर निगम | - | मुख्य कार्यपालक अधिकारी (सीईओ) |

Projects taken under Smart City Saharanpur										
S.No.	Description of Components	Quantity	Unit	Rate per Unit	Cost (Rs Crore)					Remarks
					Total Cost	Convergence Scheme	Smart City	PPP	Convergence Amount	
Area Based Development										
1. SAHART Multiple Economies										
1.10	Strengthening Common Facility Centre and development of Research and Design center for wooden handicrafts with Tools, Machinery and equipments for wooden handicrafts carving at Old Bus Stand	6000.00	sqm	90000.00	54.00		54.00			
1.20	Development of cold storage & food processing unit at Mandi Samiti with logistic center reinforcement with Dedicated Eastern Freight Corridor and railway station		LS		32.00	PPP	4.00	28.00		
1.30	Development of Commercial Shopping & Office Complex with Multilevel Parking at Delhi Bus Depot	20000.00	sqm	100000.00	200.00	PPP	20.00	180.00		
1.40	Single Window Clearance system for facilitating economic activities and establishment of new industries		LS		1.00		1.00			
1.50	Promotional activities for Wood carving activities on Local, National & International platform		LS		4.00		4.00			
Sub Total SAHART Multiple Economies					291.00		83.00	208.00	0.00	
2. SAHART Sewerage & Sanitations										
2.10	Strengthening Sewerage Network	200.00	Km	8000000.00	160.00	AMRUT	142.85		17.15	
2.20	Provision of SCADA monitoring for Sewerage System		LS		2.00		2.00			
2.30	Automatic sewer cleaning machine for cleaning sewers	5.00	Nos	1000000.00	0.50		0.50			
2.40	Fecal Sludge Management System and Novation of FSTPs with SCADA & Energy Generation	4.00	Nos	500000.00	0.20		0.20			
2.50	Development of Solar based Smart Public Toilets with facility of self- cleaning, display Boards and Voice Guidance and ICT based monitoring	80.00	Nos	1200000.00	9.60	PPP	0.15	9.45		
Sub Total SAHART Sewerage & Sanitations					172.30		145.70	9.45	17.15	
3. SAHART Solid Waste Management										
3.10	Sensor based garbage bins with Bin Clearance -RFID readers and GPRS Systems, GPS devices	400.00	Nos	50000.00	2.00		2.00			
3.20	GPS installed vehicles for primary segregated garbage collection	22.00	Nos	2500000.00	5.50		5.50			
3.30	Bio-composting in Sabzi Mandi & wood carving areas to decompose the horticulture and wood waste.	4.00	Nos	400000.00	1.60	PPP		1.60		
3.40	Household bins for segregation of organic and inorganic wastes	30000.00	Nos	4000.00	12.00		12.00			
3.50	Provision of Compactors for Secondary Garbage transportation	50.00	Nos	30000.00	0.15		0.15			
3.60	Land for Disposal of Solid based under convergence of SMC fund		LS		30.00	SMC			30.00	
3.70	Development of database of SafaiMitras, Supervisors and Sanitary Officers and integration with SAHART App.		LS		0.30		0.30			
3.80	Provision of Polythene bags processing plant at village Battanwala, Dehradun Road hectare)		LS		8.00		8.00			
3.90	Waste to Compost Plant at village Battanwala, Dehradun Road		LS		10.00	PPP		10.00		
Sub Total SAHART Solid Waste Management					69.55		27.95	11.60	30.00	

4. SAHART Transport-Walkability									
4.10	Development of Internal Roads, strengthening, widening and beautification in ABD area with NMT friendly features	35.00	Km	27000000.00	94.50		94.50		
4.20	Junctions Improvement (Qutubsher, Ghanta Ghar, Fountain Chowk, Nehru Market Chowk, and Railway Station Chowk)	11.00	Nos	1000000.00	1.10		1.10		
4.30	Development of Pedestrian Infrastructure along Railway Road, Chilkana Road, Sohraab road, Bhagat Singh Road, NH73, Road along River Paondhoi, Gurudwara Road, Abdul Salam Road	15.00	Km	10000000.00	15.00		15.00		
4.40	Development of Smart ON & OFF street Parking along Railway station Road, Mandi Samiti Road and over Paondoi River		LS		9.00	PPP		9.00	
4.50	Smart Underground & Multilevel parking at Jubilee Park & Old Bus Stand		LS		25.00	PPP		25.00	
4.60	Development of Parking Management system for On-Street, Off-Street and Multi-level parking with Sensors & Camera showing capacity & availability.		LS		0.50			0.50	
Sub Total SAHART Transport-Walkability					145.10		111.10	34.00	0.00
5. SAHART Safety and Security									
5.10	Installation of CCTV camera with night vision and control Cables in Public Open spaces on Roads and Streets not covered under ITS	200.00	Nos	200000.00	4.00		4.00		
5.20	Traffic Police booths for safety & Security	10.00	Nos	500000.00	0.50		0.50		
5.30	Variable sensors for pedestrian/ traffic count		LS		1.00		1.00		
Sub Total SAHART Safety and Security					5.50		5.50	0.00	0.00
6. SAHART Water Supply Improvement									
6.10	Development of feeder mains and Water Distribution Network	100.00	Km	6000000.00	60.00	AMRUT	50.24		9.76
6.20	Provision of Smart Consumer Water Meters with SCADA based monitoring		LS		2.00		2.00		
6.30	Automated online water quality Monitoring System for distribution network		LS		1.00		1.00		
6.40	Geo-Thermal Imaging Leak detectors		LS		0.50		0.50		
6.50	Rain Water Harvesting at government buildings with subsidized rates (Water recycling through rainwater harvesting at community level and recharge pits)	100.00	Nos	300000.00	3.00		3.00		
6.60	Ground Water Recharging through Storm water drainage system along with landscape islands and infiltration planters.		LS		3.00		3.00		
Sub Total SAHART Water Supply Improvement					69.50		59.74	0.00	9.76
7. SAHART Power Supply Strengthening									
7.10	Smart Components in Power Sub-stations 33/11 KV & 11KV/440 V		LS		2.00		2.00		
7.20	Smart Distribution Network with sensors	100.00	Km	2000000.00	20.00		20.00		
7.30	Smart Consumer Metering with SCADA based monitoring	20000.00	HH	3000.00	6.00		6.00		
7.40	Solar Power Rooftop Installations on government buildings, public institutions, (Mission Solar Energy (Committed) (Rs. 1.20 lakhs Per KW) Roof-top (30% Subsidy)	420400.00	sqft	750.00	31.53	Mission Sloar Energy	22.07		9.46
7.50	Solar High Mast Light at identified five Junctions	5.00	Nos	1000000.00	0.50		0.50		
Sub Total SAHART Power Supply Strengthening					60.03		50.57	0.00	9.46

8. SAHART ROBUST INFRASTRUCTURE									
8.10	Robust retrofitting of Old city area of Raj Colony, Hayat Colony, Municipal colony, Baba Laldas, Hasan colony, Madanpuri & Khatakheri	500.00	Acre	3000000.00	150.00		150.00		
8.20	Underground Utility Duct with Sensors	150.00	Km	10000000.00	150.00	IPDS	129.00		21.00
8.30	Development of facilities for Urban Poor (with 2 Raen Basera-night shelters at Delhi bus stop & Government Hospital & 1 Old age home)	LS			2.00		2.00		
Sub Total SAHART ROBUST INFRASTRUCTURE					302.00		281.00	0.00	21.00
9. SAHART Public Open Spaces Development									
9.10	Revitalization of Paondhoi River (Desilting, Bund strengthening, Deweeding, Turfing and Lining Cleaning through aeration techniques, Drains development, inter-linkages Retaining wall/fencing)	LS			30.00		30.00		
9.20	Vending zones development in ABD area	25.00	Nos	2500000.00	6.25	PPP		6.25	
9.30	Rejuvenation of parks in ABD area (Smart Chaupal- Model of a low cost, conversion of small and underutilized spaces for the passive or active recreation & seating of people,1 Wellness center including Yoga center, Jubilee park- Child-friendly, disabled & Gandhi Parks-open air gym and age friendly	LS			2.00		2.00		
9.40	Urban forestry and Landscaping through block plantations, Avenue Plantation, Lined Tree Plantation etc. (Hardscape, Softscape, Signage & furniture)- Along the sides of Dhamola river with Meshed Fencing and Other Green Spaces.	570.00	m	100000.00	5.70		5.70		
9.50	Mega Park development at Plot No. 355 KHA(1.342 hectare) at Sadak Dudhli, Dehradun Road	13420.00	sqm	50000.00	67.10	PPP	2.00	65.10	
Sub Total SAHART Public Open Spaces Development					111.05		39.70	71.35	0.00
10. SAHART Healthcare & Education									
10.10	First-aid centers for quick medical facility incase of emergency	5.00	Nos	800000.00	0.40		0.40		
10.20	Mobile clinic & Telemedicine facility	5.00	Nos	2000000.00	1.00		1.00		
10.30	Smart E-library & career counselling center (at existing municipal library)	1.00	Nos	1000000.00	0.10		0.10		
Sub Total SAHART Healthcare & Education					1.50		1.50	0.00	0.00
11. SAHART Responsive Governance									
11.10	Wi-fi Hotspots for Internet facility	LS			40.00	PPP		40.00	
11.20	Capacity building programs of SMC officer for efficient management of ICT based infrastructure and new technology	LS			3.00		3.00		
11.30	Training and Orientation for citizens (video tutorials clips on SAHARAT App for training & guidance)	LS			5.00		5.00		
11.40	Environment Monitoring Stations	5.00	Nos	4000000.00	2.00		2.00		
11.50	Development of Solar based Fresh Drinking water kiosks	70.00	Nos	800000.00	5.60	PPP		5.60	
Sub Total SAHART Responsive Governance					55.60		10.00	45.60	0.00
Total -Area Based Development Proposal					1,283		816	380	87

Pan City Development

Pan City Development									
12. SAHART Transportation & Traffic Management									
12.10	Smart Traffic Management System - Synchronized Traffic Signals for optimum traffic flow with Automated Traffic Control System, PELICAN crossing- pedestrian activated signals at crosswalks, bicycle actuated signals & Lane monitoring and control signs		LS		20.00		20.00		
12.20	Variable Message Sign Boards: Digital Signalisation Special designed boards with smart features		LS		3.00	PPP		3.00	
12.30	Development of Corridors and Routes for last mile connectivity		LS		3.00		3.00		
12.40	Automatic Traffic Violation Deduction Camera on edge services		LS		2.00		2.00		
12.50	Strengthening existing based IPT Transit system using ICT intervention								
a	E-rickshaws registrations, route regularisation		LS		2.00		2.00		
b	Pre-paid booth at e-rickshaws parking places and fleet development for strengthening IT based city transit system		LS		8.00	PPP		8.00	
c	E-rickshaws parking facility with solar based charging system		LS		8.00	PPP		8.00	
Sub Total SAHART Transportation & Traffic Management					46.00		27.00	19.00	0.00
13. SAHART Governance Management System(SGMS)									
13.10	SAHART Command and Control Centre - ICT enabled Integrated Central Command Center for city enhanced service delivery and monitoring	8000.00	sqm	85000.00	68.00		68.00		
13.20	CCTV surveillance system (CCTV cameras at each entry point of city, major nodes, public spaces, parks and itegration with Command & Control Centre	300.00	LS	500000.00	15.00		15.00		
13.30	SAHART CITY app development for advanced Grievance Redressal System with integrated city services(payment of all utilities taxes-property, Water, electricity bill etc).		LS		5.00		5.00		
13.40	Departmental Database Digitization and Integration		LS		7.00		7.00		
13.50	Smart Digital Screen: Info/Social Messaging/Alerts/Smart Digital Advertisement	300.00	Nos	600000.00	18.00	PPP		18.00	
13.60	Development of Property & Utility Details using GIS based Mapping		LS		7.00		7.00		
13.70	LED Street Lights (Sensible Street Lighting at selected core areas with replacement by LEDs and installing motion detectors on 1 in 4 lamp posts in sub-arterial roads to reduce energy consumption)	12500.00	nos	33000.00	41.25	SMC	5.00		36.25
13.80	ICT support to Solid Waste Collection for improved efficiency and monitoring of collection, transportation and disposal		LS		2.00		2.00		
13.90	SCADA based online monitoring for existing Tubewells with web based automatic switch ON & Off with scheduling + Current flow based operational status monitoring systems, Surveillance and SOS		LS		3.00		3.00		
Sub Total SAHART Responsive Governance					166.25		112.00	18.00	36.25
Total - Pan City Proposal					212		139	37	36
Total - SCP Cost					1,495		955	417	124
Project Preparation and Detail Project Report Preparation (@ 1% of Total SCP Cost)					9.55		10		
Total Project Cost under Smart City Mission in Rs. Crore					1,504.9		964	417	124