Dharamshala – Smart City Proposal

Step Forward to a Smart Neighbourhood
OUTLINE

- Dharamshala City Assessment – 2015
- Citizen Engagement for Smart City Dharamshala
- Smart Dharamshala 2025 - Area based Proposal
- Smart Dharamshala 2025 - Pan City Proposal
- Draft Financial Proposal

1. City Assessment and Vision
2. Area Development Plan
3. Pan City Solution
4. Finance and Implementation
Dharamshala City Assessment 2015
CITY PROFILE
Demographics 2015

- Area (acres): 6000+
- Population (2011): 54000
- Tourist (per year): 15 lakhs
- International tourist: 15%
DHARAMSHALA: City Context and Assessment

STRENGTHS
- Strong Tourism Base
- Immense Natural and Cultural Heritage
- Abundant Water supply
- Sustainable power supply
- Smart infrastructure initiatives
- Good health & educational infrastructure
- Environmentally conscious and civically responsible community

WEAKNESS
- Lack of activities and infrastructure to hold tourists
- Lack of public transport and inadequate NMT infrastructure
- Inadequate and inefficient urban services delivery
- Weak institutional and financial base of Municipal Corporation
- Seasonal, Tourism-based economy with lesser job opportunities

OPPORTUNITIES
- Opportunity of developing a Global Tourism Destination
- Developing city
- Sports and adventure destination, Regional adventure sports institute
- Thick forest cover, perennial water streams and mesmerizing landscape
- Cultural Economy
- Availability of Government land parcels

THREATS
- Unplanned growth and inefficient land management
- Large floating population
- Climate Change and hazard vulnerability
- Steep vehicular growth in recent past due to lack of PTS
- Digital divide in spite of good INTERNET connectivity
CITIZEN ENGAGEMENT

- Methodical Citizen Engagement at each stage
  - Ward-wise public meetings
  - Smart City Online Discussion Forum
  - Dharamshala Smart City Facebook community discussions

- Public Campaign – Nukkad Natak, Smart City Walk, Smart City Marathon, Essay and Painting Competitions
CITIZEN ENGAGEMENT

Voices from the Citizens

# Conservation of environment  # Walkability and mobility
# Wi-fi connectivity  # Efficient land management
# Rejuvenation and development of cultural heritage
# Accessible and efficient infrastructure services
# Opportunities for the youth  # Citizen friendly governance
# Awareness and sensitization - make people smart
We envision Dharamshala as a global tourist destination which is sustainable, resilient and smart while being, for its residents, a city which is livable, economically vibrant, safe and inclusive.
MEASURABLE GOALS

FA1 - Global tourism destination for all seasons and all reasons

G.1: Diversification and development of tourism attractors, supported by infrastructure, facilities and Tourist Travel Planner App
G.2: Increasing average duration of Tourist stay from 1.5 days to 2.5 days

FA2 - Smart multi-modal mobility system for citizens and tourists

G.3: Development of reliable, affordable and high quality public transportation system to restrict car ownership growth rate to 1% by 2025
G.4: Reducing traffic congestion caused by on-street parking and idling of vehicles
G.5: Provision of infrastructure to increase NMT trip shares from 30% to 40%

FA3 - Safe city

G.6: Crime and accident-free Dharamshala
G.13: Inclusive city planning that focuses on urban regeneration, place-making and inclusive street design to promote social cohesion and universal accessibility
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**FA4 - Environmentally sustainable and disaster resilient city**

G.7: Developing a nature-urban connect for environmental sustainability  
G.8: Developing effective disaster and emergency management system

**FA5 - State-of-art infrastructure for enhanced quality of life**

G.9: Zero Waste City  
G.10: 24 x7 reliable and environmentally sustainable power supply  
G.11: 24X7 Potable Water supply  
G.12: Eradication of water pollution and water-borne diseases caused due to discharge of untreated waste water in natural drains and surface water streams

**FA6 - City for All**

G.13: Inclusive city planning that focuses on urban regeneration, place-making and inclusive street design to promote social cohesion and universal accessibility  
G.20: Ensuring housing for all income groups by 2025 & integration among social groups
FA7 - City of jobs

G.14: Integration of Informal sector
G.15: Diversification of employment base through education and skill development and evolving into a perennial economy

FA8 - ICT enabled doorstep governance and making the citizens ears and eyes of the city

G.16: Promotion of a central data system to strengthen interoperability and cross-sectoral coordination
G.17: Mainstream data governance in urban governance and strengthen technical human capacity
G.18: Empower citizens with public data access and information to become equal contributors to governance processes
G.19: Introduce and improve channels that enhance G2G, G2C, G2B services
AREA BASED PROPOSAL

775 ACRES
27000 POPULATION

MALE:

FEMALE:

WARD NAMES

Bhagsunag
Mcleodganj
Kashmir House
Khazanchi Mohalla
Kotwali Bazaar
Ram Nagar
Sham Nagar
Secretariat
<table>
<thead>
<tr>
<th>Identified Projects – Fast Track Round</th>
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<tbody>
<tr>
<td>AP 1 - Conservation and development of</td>
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<td>natural and cultural heritage</td>
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<td>AP 1.1 - Bhagsu Nag Temple Precinct Area Development,</td>
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<td>AP 1.2 - McLeodGanj Redevelopment Project</td>
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<td>AP 1.3 - Streetscaping at Depot Bazar</td>
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<td>AP 2 - Recreational Tourism</td>
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<td>AP 2.1 - Themed Park - Mini Himachal - Charan Khad</td>
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<td>AP 2.2 - Tourist Interpretation Centre with kalagram - Charan Khad</td>
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<td>AP 2.3 - Rejuvenation Centre at Bhagsu</td>
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<td>AP 2.4 - Funicular at Bhagsu</td>
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<td>AP 3 - Reconnecting with nature</td>
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<td>AP 3.1 - Eco-tourism: Camping, Tree houses, nature trails etc</td>
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<td>AP 4 - Business Tourism</td>
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<td>AP 4.1 - Convention Centre with Sky-air restaurant - Mc LeodGanj</td>
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<td>AP 5 - Adventure Tourism</td>
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<td>AP 5.1 - Upgradation of Mountaineering and paragliding institute</td>
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<td>AP 6 - Smart Public Transport System</td>
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<td>AP 6.1 - Intelligent and barrier free Bus shelters</td>
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<td>AP 6.2 - ICT enabled e-Buses</td>
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<td>AP 6.3 - Development of city bus depots including Charging stations (2 locations)</td>
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<td>AP 6.4 - Modernisation of ISBT - Kotwali Bazar (includes escalator along with existing stairway)</td>
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<td>AP 6.5 - Modernisation of ISBT - McLeod Ganj (includes escalator along with existing stairway)</td>
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<td>AP 7 - Smart Parking</td>
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<td>AP 7.1 - Smart parking at 22 locations</td>
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<td>AP 8 - NMT Infrastructure</td>
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<tr>
<td>AP 8.1 - Public Bike Sharing System (total 90 docking stations at 5 locations)</td>
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<td>AP 8.2 - Improving existing walkways and stairs</td>
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Please add more pictures on smart infrastructure here based on project list.
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<td><strong>AP 9 - Safe streets</strong></td>
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<td><strong>AP 10 - Creation of green and blue corridors</strong></td>
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<td><strong>AP 11 - Project RE-Charge</strong></td>
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<td><strong>AP 12 - Project Agni Shaman</strong></td>
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<td><strong>AP 13 - Municipal Solid Waste Management System</strong></td>
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<td><strong>AP 14 - Soch-alaya</strong></td>
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<td><strong>AP 15 - Improvement of power supply transmission and distribution system</strong></td>
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<td><strong>AP 16 - Development of renewable energy potential</strong></td>
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<td><strong>AP 17 - Smart urban water supply system</strong></td>
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<td><strong>AP 18 - Adequate and efficient Sewerage</strong></td>
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<td><strong>AP 19 - Sustainable urban drainage systems</strong></td>
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### Identified Projects – Fast Track Round

| AP 20 - Urban regeneration | AP 20.1 - Redevelopment of Kachahri Adda  
|                           | AP 20.2 - Redevelopment of Kotwali Bazar  
| AP 21 - Inclusive streets | AP 21.1 - Inclusive streets: street furniture, signage, marking, universal access  
| AP 22 - Housing and Community Facilities | AP 22.1 - Recreational Clubs for the elderly and children  
|                               | AP 22.2 - Indoor Sports Complex  
|                               | AP 22.3 - Parks and Playgrounds  
|                               | AP 22.4 - Cultural centre  
|                               | AP 22.5 - Electric crematorium  
|                               | AP 22.6 - Animal Crematorium  
|                               | AP 22.7 - Beneficiary-led Housing and Shelter for Urban homeless  
| AP 23 - Integration of Informal sector | AP 23.1 Development of dedicated vending zones  
| AP 24 - Skill and entrepreneurship development | AP 24.1 - Skill development and start up incubation centre (tourist guides, smart city technicians, vocational training)  
| AP 25 - Smart Shiksha | AP 25.1- Smart classrooms  
|                           | AP 25.2 - e-Library  

SMART MULTI-MODAL TRANSPORTATION

Existing Scenario

- NO PUBLIC TRANSPORT
- BUS STOPS ON STATE HIGHWAY
- 400% INCREASE IN PRIVATE VEHICLE OWNERSHIP

Proposed Plans – Public Transport and Parking

- INCLUSION OF BUS SHELTERS AT 60 LOCATIONS
- PUBLIC TRANSPORT – BUSES AT EVERY 15 mins
- REDESIGN OF SAFE INTERSECTIONS
- SHARED PARKING AREAS
McLeodGanj Redevelopment Project

URBAN INSERT: PROPOSED CULTURE QUARTER

MIXED USE PLANNING
Charan Khad Project

1. Tourist Interpretation Center
2. Mini Himachal Theme Park
3. Botanical Garden
Pan City Proposal
PAN CITY PROPOSAL

DCUBE
Developing Digital Dharamshala

INTELLIGENT TRAFFIC MANAGEMENT CENTER
BETTER PUBLIC TRANSIT OPERATIONS
MULTI HAZARD RISK ASSESSMENT
EMERGENCY RESPONSE SYSTEMS
CITY OBSERVATORY
SMART COMMUNITY
SMART CARD
## Identified Projects – Fast Track Round

| PCP 1 - Intelligent Traffic Management System | PCP 1.1 - CCTVs enabled intersections  |
| PCP 1.2 - Variable Messaging Systems          |
| PCP 1.3 - Solar Powered Traffic Signals       |
| PCP 1.4 - GPS enabling of taxis and auto rickshaws |
| PCP 1.5 - Surveillance Command Center         |

| PCP 2 - SMART PUBLIC TRANSIT OPERATIONS       |
| PCP 2.1 - Public Information System (PIS) with Online Travel Planner |
| PCP 2.2 - CCTV and GPS within buses           |
| PCP 2.3 - PIS for Ebuses                     |
| PCP 2.4 - Sensor based parking at 23 places with smart parking management system |

| PCP 3 - Multi-hazard community level vulnerability and Risk Assessment Tools |

| PCP 4 - SMS and Notification based Warning and Emergency Response Systems |

| PCP 5 - CITY OBSERVATORY                     |
| PCP 5.1 - DATA CENTRE AND IT HARDWARE        |
| PCP 5.2 - ONE CITY PLATFORM - Central Data Repository, CMS and Dashboards, Citizen e-Gov Services |
| PCP 5.3 - Command Center                     |
| PCP 5.4 - ICT Trainings and Capacity Building |

| PCP 6 - Smart community                     |
| PCP 6.1 – ONE CITY MOBILE APP linked to Citizen services and Online Travel Planner |
| PCP 6.2 - IEC tools for outreach & awareness |
| PCP 6.3 - E-MiTRA Network - observatory kiosks at 22 locations |

| PCP 7 - Smart Card                          |
| PCP 7.1- Smart Card for Citizens            |
| PCP 7.2 - Smart Card for Tourists           |
DCube - Linking City Systems

Intelligent traffic lights with CCTV

Smart poles with CCMS, Wi-Fi & Public announcement system

Smart Electric Grid

Bus Stop with PIS

GPS based Buses with PIS inside

Sensor based Parking

AMR Tech for electricity and water

Real time tracking of vehicles & emergency respond system

Underground bins with integrated chip technology

Connectivity with OFC & Micro Wave

CITY PORTAL

MOBILE APP

SMART CARD
SMART PUBLIC TRANSIT OPERATIONS

NAVIGATION SATELLITE

LONG DISTANCE RADIO STATION - VOICE & DATA

BUS DEPOT SERVER

LOGS, DATA, ROUTE

PIS AT BUS STOP UPDATED THROUGH CITY BRAIN

DCUBE
Developing Digital Dharamshala

PIS - INFORMATION ABOUT NEXT STOP

ESTIMATED ARRIVAL TIME

OF C CONNECTIVITY

Services from nearby stops

Stop Number: 3702816
Macleodganj CG21 - 17:09
X78 TO DHARAMSHALA 17:09
7 mins LF
74 TO NADDI 7 mins LF
X78 TO YOL CANTT. 9 mins LF
CALL 100 IN CASE OF EMERGENCY
Finance and Implementation
## Draft Financial Proposal

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Area Based Proposal</th>
<th>Pan City Proposal</th>
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<tbody>
<tr>
<td>Capex (INR Crores)</td>
<td>Annualised Opex (INR Crores)</td>
<td>Capex (INR Crores)</td>
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<tr>
<td>Total</td>
<td>1,451.77</td>
<td>42.37</td>
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<tr>
<td>% of Total Project Capex Cost</td>
<td>91.23 %</td>
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