

## Background on Master Plan - Amaravati

### 1. Introduction

The bifurcation of the erstwhile state of Andhra Pradesh following the AP Re-Organization Act in 2014 and emergence of a state with no Capital City necessitated the urgency for comprehensive planning and development of a new state Capital with world-class infrastructure that would represent people's vision and aspiration of a **'happy', 'liveable' and 'sustainable' city**'. This would be facilitated by adopting a 'bottom-up participatory approach of planning and governance' and adopting the suitable model for land procurement and exercising Land Pooling Process option as an alternative to land acquisition.



Amaravati was selected as the new Capital City of Andhra Pradesh due to its strategic location which lies between the two nodal urban centres of Vijayawada and Guntur in the Capital Region (8,600 sq. km).

The city was born after overwhelming support of 24,000 farmers who came together in India's largest-ever consensus-based land pooling of 35,000 acres.

## 2. Principles and Concepts adopted in Preparation of Master Plan

The Amaravati Capital city concept plan encompasses the following principles to develop a comprehensive city Master plan:

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1. Site setting:	Careful site selection based on its topography and position of nearby hills and water bodies. The Amaravati Capital city site has been carefully chosen within the Capital region due to its proximity to the river Krishna, the holy town of Amaravathi and existing Vijayawada city.
2. Cardinal Axis (Orientation)	City planning lays emphasis on aligning the primary roads and important city axes along the north south cardinal direction.
3. Grid Pattern:	The concept proposes development of the Amaravati Capital city in a rectangular grid.
4. North-east axis:	The Amaravati Capital city concept suggests development of a north-eastern axis to welcome flow of positive energy into the new city.
5. Brahmastan-green hub	planning, expresses the importance of a 'Brahmasthan' (Silent Centre) as the centre of any space and proposes a central green hub within the Amaravati Capital city.
6. Modular Planning	City planning recommends modular development of clusters such as neighbourhoods with central 'Brahmasthan' - central open space.
7. Growth Corridors	The Concept plan for the Amaravati Capital city proposes 3 important axes which serve as potential corridors within the city. <ol style="list-style-type: none"><li><b>Civic Axis:</b> The Concept plan proposes an important North-South cardinal axis housing the state's civic core with administrative functions like the state assembly, government offices, etc</li><li><b>Recreation Axis:</b> A north - eastern axis is planned along the existing the Kondaveeti Vagu anchored on either side by the historic Kanaka Durga temple and Neerukonda hill. This axis will be developed as the city's recreational corridor.</li><li><b>Water Front Axis:</b> The Concept plan also proposes an axis along the river front lying between the civic and recreational axis</li></ol>
8. Node	<p><b>Government Node</b> Situated close to the waterfront in the north, this node is envisioned to be the vibrant commercial and civic heart of the city housing the state's new administrative core and city's CBD.</p> <p><b>University Node</b> The university node has been identified close to the Neerukonda hill located more centrally for easy connectivity and ample open spaces in its vicinity.</p> <p><b>Tourism Node</b> The tourism node is planned in the north-east at close proximity to the famous Undavalli caves housing a number of tourism and cultural activities.</p>

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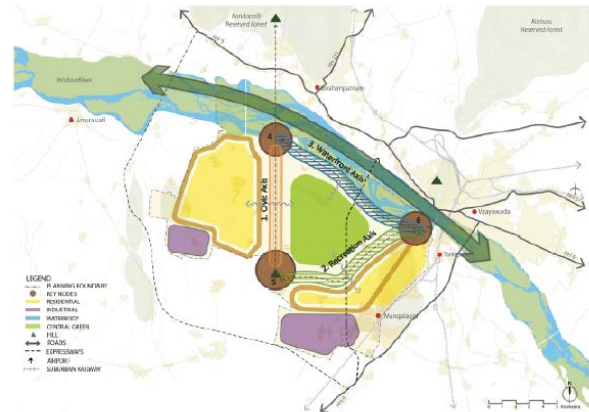
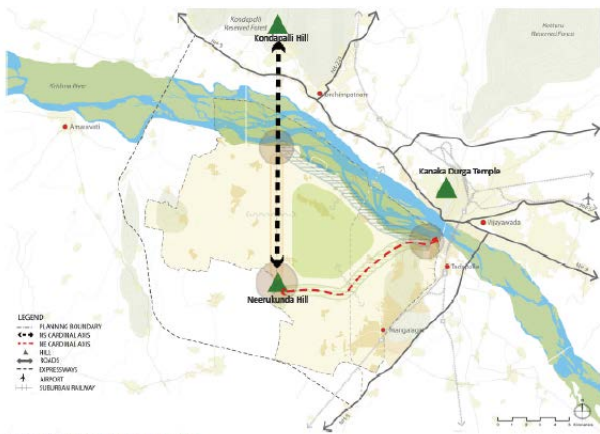
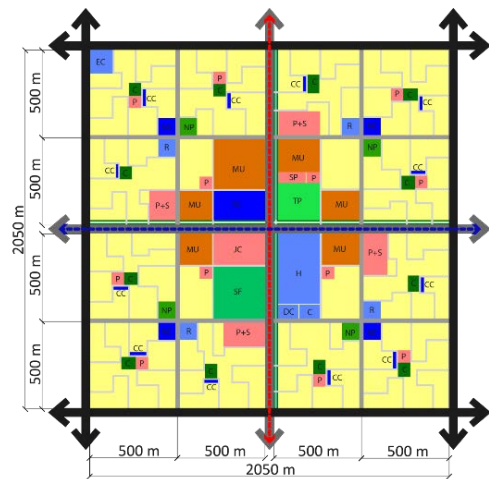


Fig.5.5 Concept structure showing three axis and three nodes

## Township Planning

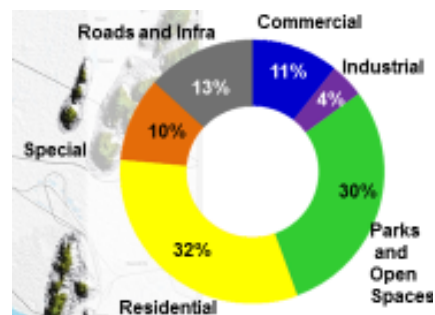
The concept proposes residential developments to be clusters into townships. Each township will be planned in accordance to the township model, designed using the strategy of hierarchical distribution of population, land uses, open spaces and infrastructure. The township model is guided by the following design principles:



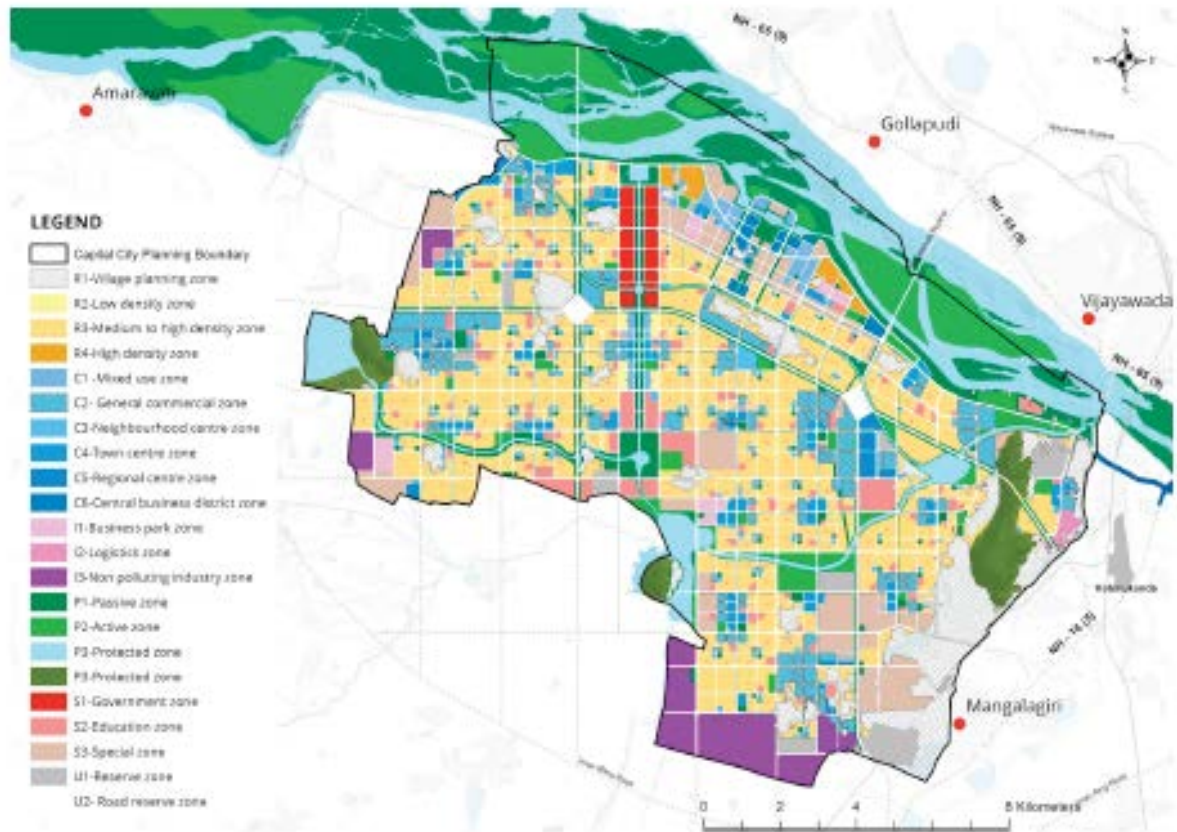
## Capital City Master Plan

Principles explained above are adopted in Preparation of Master Plan of capital City, Amaravati. The following zoning districts are proposed for the Capital city:

- Residential (R1, R2, R3, R4)
- Commercial (C1, C2, C3, C4, C5 and C6)
- Industrial (I1, I2, I3)
- Open Spaces and Recreation (P1, P2, P3)
- Institutional Facilities (S1, S2, S3)
- Infrastructure Reserve (U1, U2)



<b>1. Establishing the Cell as Core of Community/Colony Centric Planning</b>	The dimension of 500x500 meters is dedicated to house up to 4,550 housing units, creating a small community with greenery, playground and vehicle free community spaces essential for a pleasant living environment.
<b>2. Developing Walkable Neighbourhoods</b>	The cells are amalgamated into walkable neighbourhoods of 15,000 to 30,000 population with the following Characteristics: <ul style="list-style-type: none"> <li>• Well served by pedestrian friendly “local streets” and pedestrian network</li> <li>• Supported by basic amenities such as kindergarten, park and primary school, located at walkable distances (approximately 500 m radius)</li> </ul>
<b>3. Creating Vibrant Townships</b>	<b>Creating Vibrant Townships</b> , the neighbourhoods are integrated into townships that accommodate 60,000 to 1,00,000 residential population with the following characteristics: <ul style="list-style-type: none"> <li>• Efficient transport system facilitated by the hierarchy of roads, ranging from major arterial road to local access roads. Arterial roads run along the periphery defining the township boundaries and interconnecting the various townships together.</li> </ul>
<b>4. Creating Jobs Close to Homes</b>	The proposed township model proposes a number of employment nodes such as commercial offices, light industries and business parks in close proximity to residential developments. These economic nodes will be well connected to residential developments through public transport.
<b>5. Integration of Villages</b>	The proposed township model carefully integrates the existing village settlements and providing commercial centre and public facilities in close proximity to the existing settlements.



The master plan will ensure conservation of existing settlements and create employment opportunities for the city's existing population, Village Planning Zone is shown as R1.

## FACTS AND FIGURES

<b>A</b> rea	217 Sq KM
<b>E</b> xisting Settlements	25
<b>P</b> rojected Population	3.5 Million
<b>P</b> rojected Employment	1.5 Million
<b>G</b> ross Density	16,200
<b>P</b> arks and Public Facilities	within 5-10 minute walking distance
<b>O</b> pen Spaces & Recreational Zone	30% area reserved for
<b>R</b> iver Front	> 20+ km
<b>R</b> oad Length	600 Km

## A city of Nine theme cities

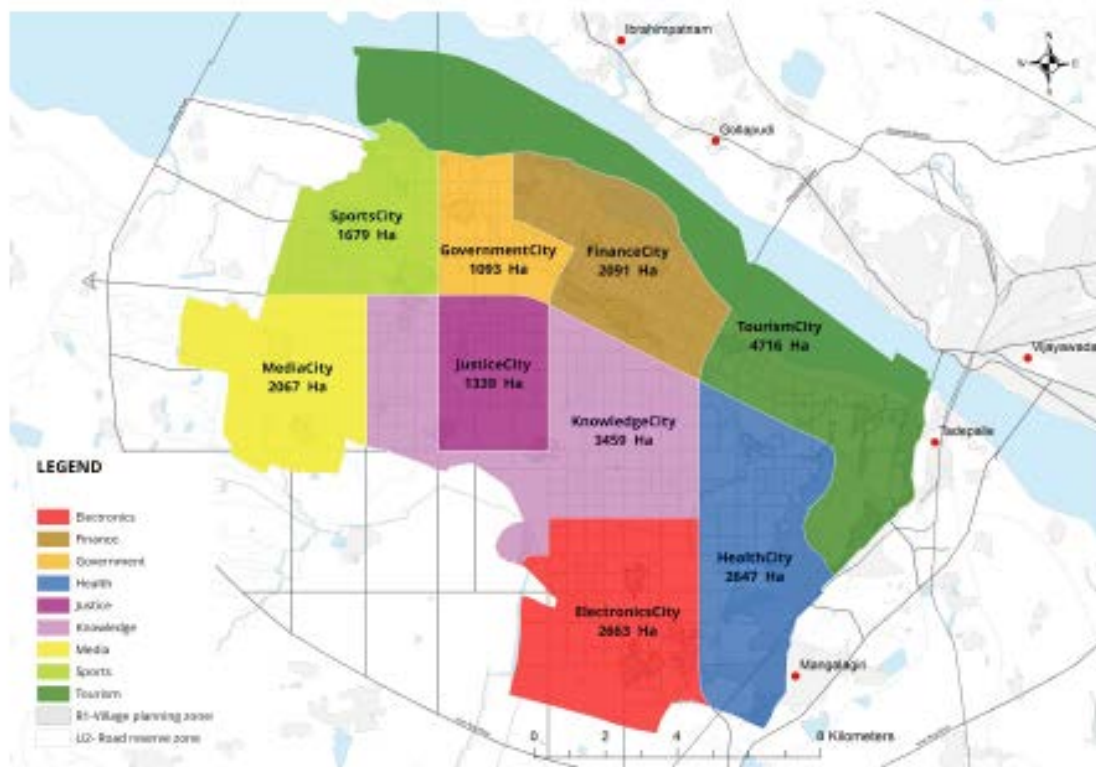
The Concept plan proposes 9 themed development cities within the Capital city. These cities have been planned to accommodate complimentary functions. Each of these cities will be a hub of activities serving a unique function and employment generators within the Capital city.

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<b>1. Government City:</b>	Government City is planned along the north-south cardinal axis. Housing several government functions and residential areas the city covers a land area of about 1093 Ha encompassing medium to high density townships that support the government core.
<b>2. Justice City</b>	Planned south of the government city along the north south cardinal axis, the Justice city will house the various judiciary functions and their support facilities. The Justice city covers a land area of about 1339 Ha
<b>3. Finance City</b>	The Finance city will be economic core within the iconic waterfront (CBD). Covering about 2091 Ha the finance city primarily houses commercial and mixed use developments
<b>4. Knowledge City</b>	Knowledge city is planned south to the Justice and Finance cities. Housing a university campus, several colleges and knowledge park, the city covers a land area of about 3459 ha
<b>5. Electronics City</b>	Planned in the south, the Electronics City will thrive on the well-established IT and electronics industry in southern India. Covering a land area of 2663 ha
<b>6. Health City</b>	A dedicated Health city compliments the well distributed health facilities, Covering a land area of 2647 Ha.
<b>7. Sports City</b>	Planned along the north western riverfront, the sports city is aimed to be a dynamic waterfront attraction accommodating large stadiums, arena and event venues for international scale sports Events, covering a land area of 1679 Ha.
<b>8. Media City</b>	The Media and Cultural city is planned close to famous temple town of Anantavaram. Covering a land area of 2067 Ha
<b>9. Tourism City</b>	The Tourism city is planned in proximity to the historic Undavalli caves along the river Krishna waterfront.

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### 3. Urban Sustainability approaches adopted in Implementation of Master Plan

The sustainable approach of planning is essential for optimal resource utilisation and management as well as addressing the critical issues like Climate Change, Energy Self-Sufficiency etc.

Following Six issues that need to be addressed in terms of Sustainability, are identified in preparation of Master plan.

The **Amaravati Capital City, Goals and Strategies to achieve Vision** are

1. **World Class Infrastructure** - > 600 km of Road Network by 2050
2. **Jobs and Homes for all**- 3.55 Million Resident Population by 2050 and 2.1 Million Jobs by 2050
3. **Clean and Green**- > 20% area reserved for Green and Blue and > 20+ km Public River Waterfront
4. **Quality Living**- Parks and Public Facilities within 5-10-minute walking distance
5. **Efficient Resource Management**- Flood Resistant City Towards Net Zero Discharge
6. **Identity & Heritage**- Heritage and Tourism Network using Roads, Metro and Waterways

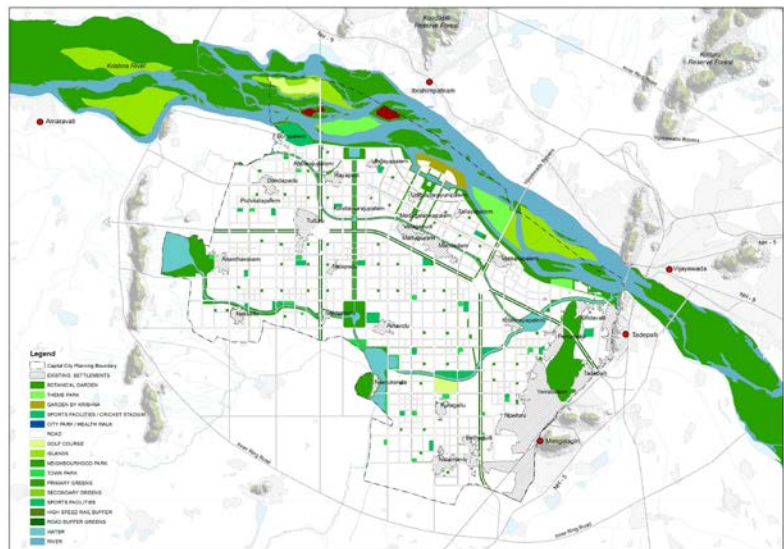
#### Proposed Green and Blue Plan

The Blue Green plan creates interfaces between the green and blue creating different water themed public spaces such as lake parks, waterfront corridor, linear parks, etc. 30 % of capital city area is reserved for Open space and Recreational Zone.

**Primary green spaces:** Primary green spaces including large city parks, lakes, town parks, neighbourhood parks, water bodies and public plazas form the foundation of the city scale recreational network that provides recreation opportunities and improves a sense of community.

Primary greens are planned along the existing canals and water bodies to serve as city's main ecological corridors. They play a dual role in flood management, and environmental conservation of the native species.

**Secondary green links:** secondary greens weave through the townships connecting the various town and neighbourhood parks mostly aligned to the arterial roads. Planned as the secondary green fingers of the city, these greens act as passive recreational spaces, interactive jogging trails and non-motorized transport corridors across the city.

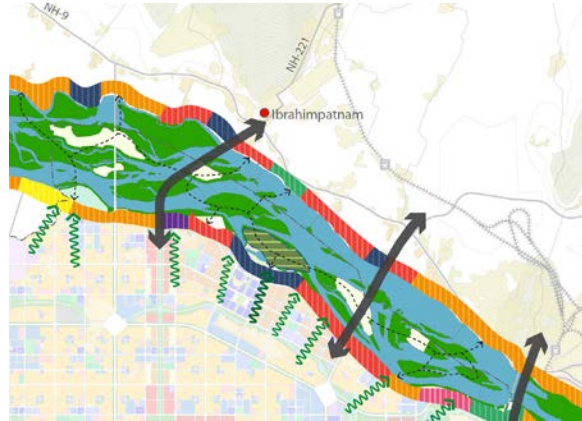




**Recreational Landscapes:** Recreational landscapes include theme parks, golf courses, sports and recreational spaces. These areas house active recreational facilities for the Capital city. Water bodies: Existing water bodies including rivers, canals and reservoirs have been carefully protected and integrated with the green spaces.

### River Front

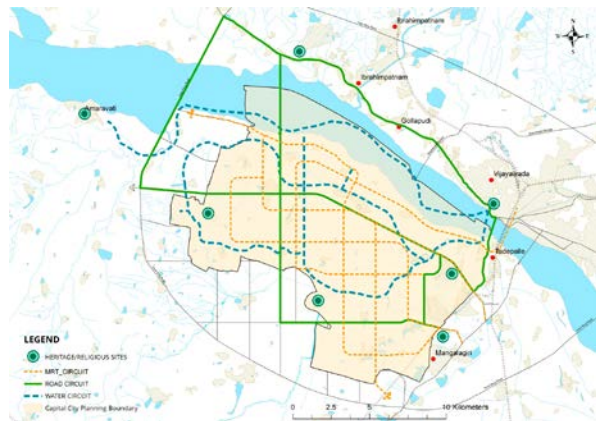
22 Km River Krishna waterfront is one of the key assets for the Amaravati Capital city. The riverfront will house the city's iconic civic core and central business district (CBD).



### Tourism Plan

The tourism circuit plan, proposes a religious tourism circuit which connects all the important religious and cultural heritage sites to provide tourists with a well-connected tourism network. This circuit will further tap to the Capital region tourism circuit. The tourism circuit will be anchored with following key destinations

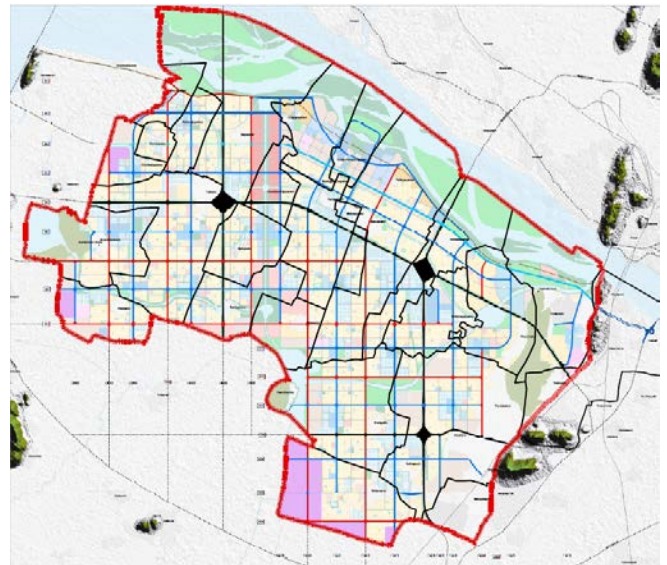
- Amaravathi Temple and Buddha Statue
- Ananthavaram Temple
- Neerukonda Hill
- Kondapalli Fort
- Undavalli Caves
- Mangalagiri Temple
- Kanakadurga Temple



## Public Transport

Integrated Land use transportation planning with well-connected public Transportation is planned in Amaravati. A grid network is planned with 4 hierarchy of roads, the proposed bus priority routes/ BRT and future Public Transportation (MRT) network run on the Sub arterial roads connecting all the town centres and commercial and recreational hubs.

Type of Roads	ROW(Mts)	Length in Km
Seed Access Road	60	19.30
Major Arterial Roads	60	51.70
Arterial	50	88.20
Sub Arterial	50	158.40
Collector Roads	25	324.57
LPS Roads		1100

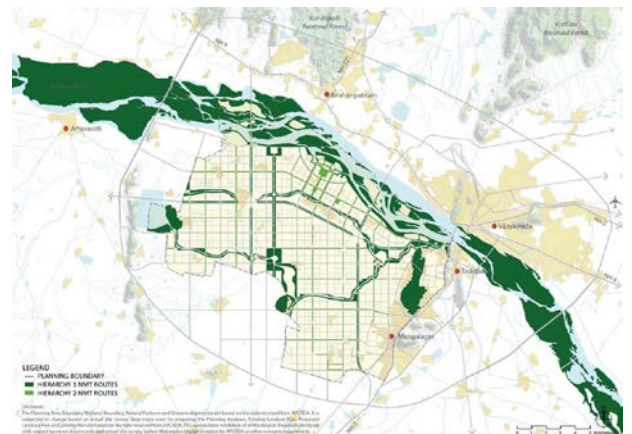


## Pedestrian Friendly City: Non-Motorized Transport plan

Dedicated non-motorized transport facilities are planned in the proposed road Network, it is important to implement proper non-motorised transport networks to ensure the safety of passengers and create environment friendly city transport system.

The NMT plan consists of two hierarchies - Primary hierarchy network connects nature areas with City parks (Nature parks, canal parks, City parks and recreational zones), The secondary hierarchy network consists of the neighbourhood parks and town parks.

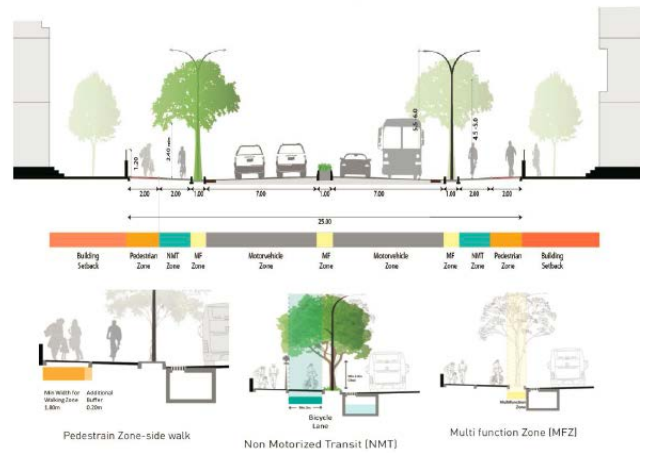
These hierarchy routes are specially dedicated for pedestrians and cyclists.



The ROW of proposed roads are not only planned for vehicles but planned dedicated spaces for both cyclists and pedestrians to promote walk to work. The key elements of street are Pedestrian Zone (Sidewalk), Non-Motorised Zone (Cycle Track), Multi-function zone, Motorised zone (Carriage way and Service zone).

**Pedestrian Zone:** The minimum width of a walking zone shall be 1.8 m, ensuring that a wheelchair and a walking person can both fit within any section of the zone.

**Cycle-Pathway:** The minimum width of an unidirectional, single bicycle lane shall be 2 meters and double bicycle lane shall be 2.5 meters.



## Public Facilities

There is a holistic planning of Utilities and Public Facilities, Public facility provisions play a critical role in determining the quality of life within Amaravati Capital City. The public facilities within the Amaravati Capital city have been planned at 4 hierarchical levels, these include:

- City Level
- Regional Level
- Township Level
- Local/ Neighbourhood Level

	<b>City / Regional Level</b>	<b>Township Level</b>	<b>Neighbourhood Level</b>
Educational Facilities	Technical Education Centre, Engineering College, Medical college, Other Professional College etc	Junior College	Primary School, Secondary School
Health & Medical	General Hospital etc	Polyclinic, Multi-specialty Hospital	Health centre/ clinics/ Dispensary
Civic & Community Institutions	Police, Civic Facilities etc	Fire Station, Police	
Parks & Open Space	City Level Park, Botanic Garden	Town Park	Neighbourhood Park
Sports & Recreation	Divisional Sports Centre, City Square, Convention Centre, Museums etc	District Sports Complex	Religious
Commercial Facilities	Local Whole Sale Markets/ Mandis	Town Centre	Local Market

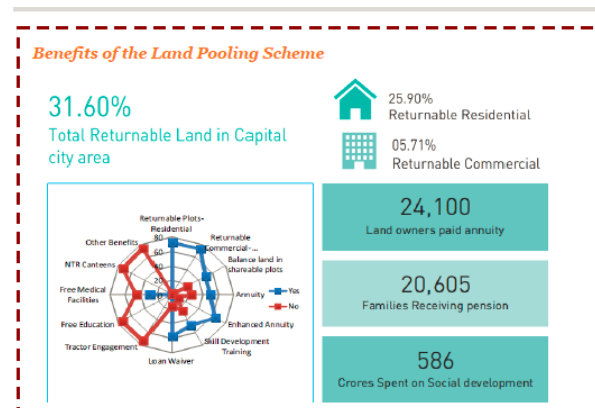
## 4. Key Success factors in Master Plan Implementation

### a) Land Pooling Mechanism for Land Procurement

Land Pooling Scheme is intended for Land Owners volunteering to offer their land against a guaranteed return of developed and reconstituted plot and other benefits. Under land pooling scheme, landowners voluntarily sign ownership rights over to a single agency or government body. This agency develops the land by developing public infrastructure like roads, sewage lines, ICT etc. Thus the land pooling scheme will create a win-win situation for the landholders, citizens and government.

- The land pooling scheme came into existence from January 01, 2015.
- Within 60 days of operation, agreements covering to an extent of over 30000 acres were received from over 25000 farmers.
- Strong implementation framework, grievance redressal mechanism and timely disbursement of benefits.
- Returnable plots, transparent plot allotment policy through lottery, 5000 options to opt for

returnable plots and LPS returnable layout have brought more LPS farmers into confidence and their active participation at every stage in the LPS process



### b) Integration of existing villages into Amaravati development

As a Master planning objective, all the existing settlements of the Capital city have been retained and strengthened by seamlessly integrating with the new land pooling scheme developments. This has been addressed through land use planning, shared social and economic infrastructure (neighbourhood centres, town centres etc.).

### c) Bottom up approach and Public Consultations

Continuous bottom up engagement process with landowners and citizens of Amaravati in day-to-day interactions through public consultation, participation and knowledge sharing workshop with respect to selection of the project site, land allocation through land pooling system, identifying the critical issues at the village level and thereby integrating them at the local level planning as well as the overall city level planning to achieve a sustainable ecology in the city development process.

### d) Social Inclusion:

This would aim at achieving seamless integration of the neighbourhood level local community/ village planning unit with the broader city level unit through improved connectivity, mobility, communication system as well as promoting social integration and inclusive planning principles in terms of urban design guidelines, town planning concepts and zoning regulations that targets population of varied age groups as well as social class structure.

Stage	
<b>Declaration of Capital Region/Capital City</b>	30-12-2014 - The Government declared Capital Region vide G.O.Ms No. 253 MA 30-12-2014 - The Government declared Capital City vide G.O.Ms No. 254 MA 30-12-2014 - The Government Constituted of APCRDA vide G.O.Ms No. 255 MA
<b>M.O.U with Govt of Singapore</b>	8-12-14 - INCAP, Govt. of A.P. entered M.O.U. with International enterprises, the Govt. of Singapore to prepare the Master plan for the new Capital city of residual Andhra Pradesh
<b>Plans submission by Government of Singapore</b>	30-03-15 - Singapore Govt submitted Perspective plan for the Capital Region in Singapore 25-05-2015 - Singapore Govt submitted Master plan for the Capital City in Hyderabad 20-07-15 - Singapore Govt submitted Seed Development plan in Rajahmundry
<b>Workshops with Domain Experts</b>	7-08-2015 to 9-08-2015 - Workshop with domain experts on capital city master plan 19-10-15 - Workshop with domain experts on capital city master plan 27-10-15- Workshop on capital city master plan with line department HODs and secretaries
<b>Draft Master plan</b>	Draft Master plan for capital city area –Amaravati was prepared under section 38 of APCRDA Act,2014 and as per section 39 of APCRDA act ,2014 was notified in part-1 of Andhra Pradesh extra ordinary Gazette Vide No 408 dated 26.12.2015 inviting objections and suggestions from public within period of 30 days from the date of notification.
<b>Awareness Programme on Draft Master Plan</b>	6-1-2016 - Awareness programme on Draft Master Plan to Land owners at Guntur 12-01-2016 - Village level Awareness programme on Draft Master Plan to Landowners (Nelapadu,Sakhamuru,Anantavaram,Borupalem,Abburajupalem) 13-01-2016 - Village level Awareness programme on Draft Master Plan to Landowners (Rayapudi and Kondamarajupalem,Lingayapalem & Thallayapalem,Neerukonda,Kuragallu,Ainavolu) 17-01-2016- Village level Awareness programme on Draft Master Plan to Landowners Uddandarayunipalem,Lingayapalem,Mandadam 19-01-2016- Village level Awareness programme on Draft Master Plan to Landowners (Bethapudi,Nowluru,Undavalli,Venkatapalem) 20-01-2016- Village level Awareness programme on Draft Master Plan to Landowners (Nidamaru,Krishnayapalem,Yerrabalem,Penumaka) 21-01-2016- Village level Awareness programme on Draft Master Plan to Landowners (Mandadam,Velagapudi,Malkapuram,Thulluru,Nekkellu,Donapadu & Pitchukalapalem) 02-02-2016- Meeting with Special Deputy Collectors all units on draft Master plan (objections and suggestions on Master plan)
<b>Final Master Plan</b>	APCRDA has scrutinized all Objections and suggestions received within the stipulated period and made certain modifications as per section 39 (3) and approved the detailed master plan of capital city- Amaravati following process. Detailed Master Plan of Capital city - Amaravati was notified vide Gazette No 18, dt.23-02-2016



## 5. Way forward and Challenges in Implementation

### a) Way forward

#### Policy Framework related Actions

- **Enforcement of Amaravati Zoning Regulations**, will ensure to safeguard the health, property and public welfare by controlling the design, location, use or occupancy of all buildings and structures through the regulated and orderly development of land and land uses within this jurisdiction.
- Formulation of Urban Design Guidelines (with focus on urban design elements)

#### Administrative Actions

- **Land Management System** - Development of Land Management System for CRDA lands
- **Organization setup**- *Formulation of Zonal Offices*

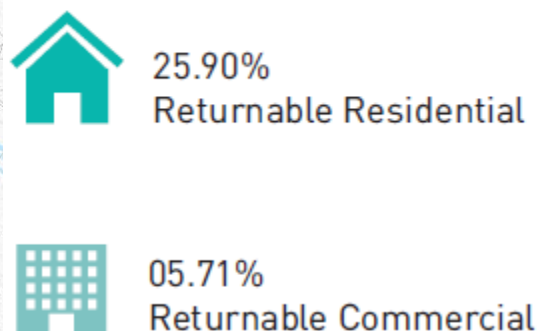
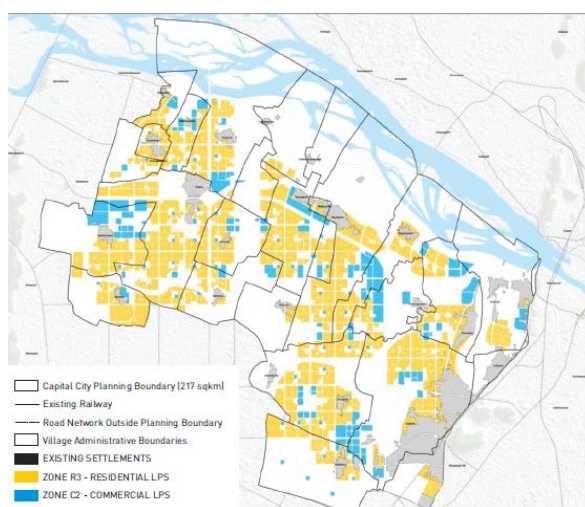
### b) Challenges

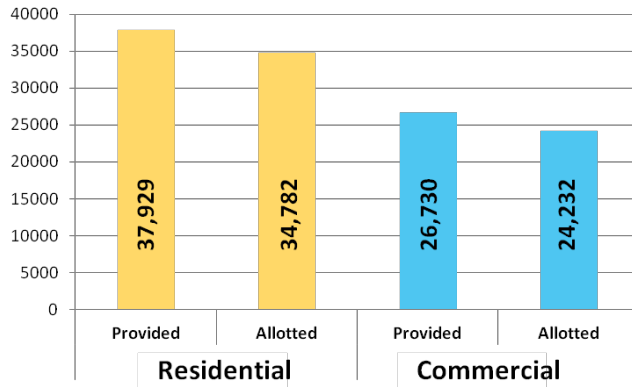
- How to support Affordable housing?
- How to cope with proposed high Density in Amaravati?
- How to promote orderly development of periphery areas of capital city?
- How to encourage to use Non-Motorized transport and Public Transport?

## 6. Land Pooling Scheme:

Land Pooling Scheme is one of the innovative and pioneering concepts of land procurement and land exercising options that has been adopted by the Government of Andhra Pradesh as an alternative to land acquisition to involve the local people in the decision making, urban planning and development of the Amaravati Capital City thereby promoting the vision of the 'Peoples' Capital' through inclusive participatory planning to represent its citizens' aspiration in the long run.

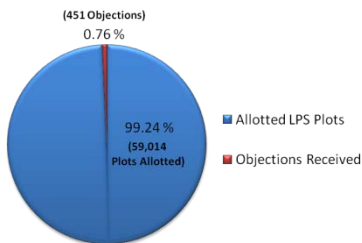
Land Pooling Scheme is intended for Land Owners volunteering to offer their land against a guaranteed return of developed and reconstituted plot and other benefits. Under land pooling scheme, landowners voluntarily sign ownership rights over to a single agency or government body. This agency develops the land by developing public infrastructure like roads, sewage lines, ICT etc. Thus the land pooling scheme will create a win-win situation for the landholders, citizens and government.





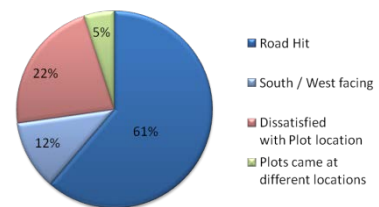
### Plot allotted till date through LPS Lottery process

#### Objections Received Percentage



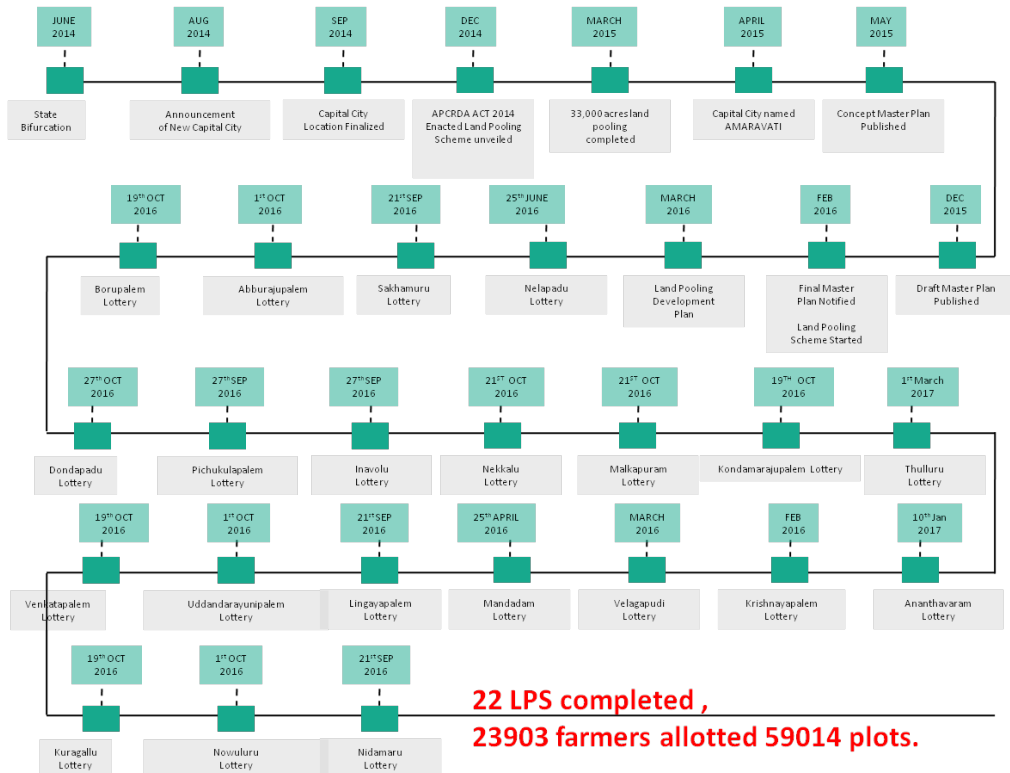
• Out of the 59,014 plots allotted, only, 451 objections were received and are less than 1% of the allotted plots

#### Abstract of Objections – Issue wise



• Majority of the objections are regarding Road hits to the plots, while only 24.8% of the total road hits are direct Road Hits for Residential plots

### Landowners' acceptance towards LPS development plans and lottery process



**LPS Timeline:** The LPS process was completed in a record breaking time of two years with highest quality control from the date of AP State formation.

### Land Pooling Scheme Planning Objectives:

- **Village Integration:** Conscious attempt has been made in the physical planning & design of the Nelapadu LPS layout to facilitate the inter-weaving of the Existing village settlements with the Capital city and new development layouts.
- **Environmental Sustainability:** Environmental Sustainability is being achieved through;
- Uninterrupted provision and availability of the **infrastructure services** (physical and social infrastructure), power and utilities and disaster resilient planning interventions.
- **Improved quality of life and live-ability standards** ensuring physical and social well-being of individuals as well as comfort.
- **Reducing environmental** impact through emphasis on public transport and sustainable mobility like pedestrian and cycle connectivity throughout the city.
- **Social Inclusion:** This would aim at achieving seamless integration of the neighborhood and community facilities with the broader city level unit through improved connectivity, mobility, communication system as well as promoting social integration and inclusive **planning principles** in terms of **urban design** guidelines and zoning regulations that targets population of varied age groups as well as social class structure and gender.
- **Public Consultation and Participation:** Continuous bottom up engagement process with landowners and citizens of Amaravati in day-to-day interactions through public consultation, participation and knowledge sharing workshop with respect to selection of the project site, land allocation through land pooling scheme, identifying the critical issues at the village level and thereby integrating them at the local level planning as well as the overall city level planning to achieve a sustainable ecology in city development process.

### Land Pooling Scheme Development Layouts Planning Principles:

- **Modified** fused grid to **promote pedestrian friendly environment** and discourage motorized traffic.
- **Neighborhood and community facilities** with ten and five minute walking distance respectively.
- Heterogeneous density of plots to allow larger plots on larger roads and smaller plots near smaller roads.
- No more than three vehicular entry exits to each neighborhood.
- **Social and Cultural sentiments** of the landowners we taken into account when planning the layouts.
- Vehicular plot access is restricted on collector road.

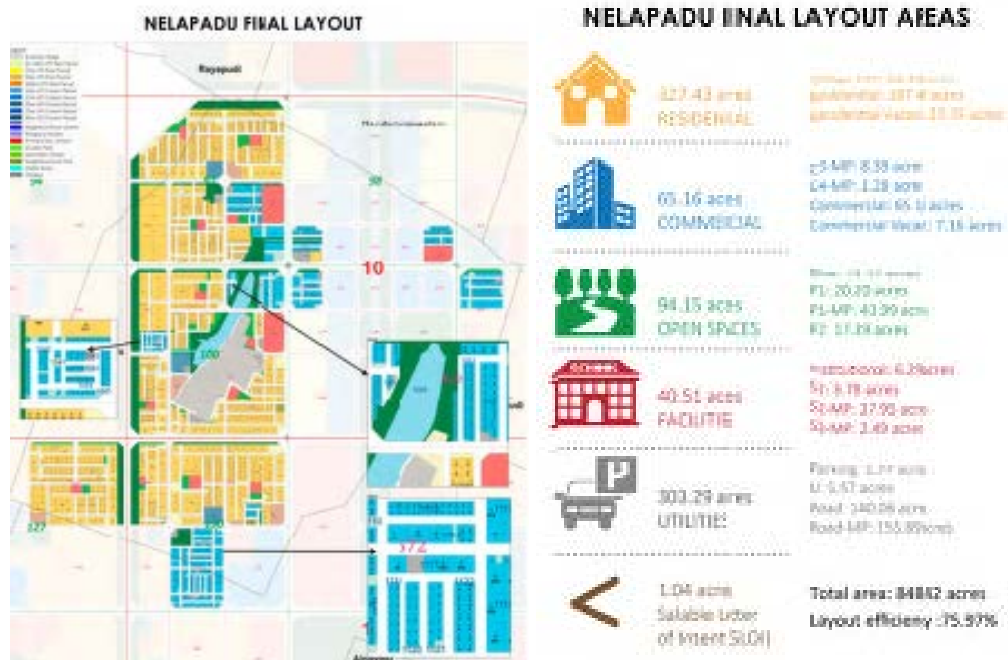
### Case of Nelapadu LPS:

**Nelapadu** is located in the South-Western quarter of the Capital City. The village has a geographical advantage of being in close proximity to Government Complex, Major town centers and Educational Institutions. Nelapadu Village being the first village to participate in the LPS and being well responsive to the Land Pooling process was taken up as the first village for preparation

of the layout of the returnable plots under the Land Pooling Scheme. Following the official allotment of returnable plots on 25th June 2016, Nelapadu has become the point of reference for preparation of Land Pooling layouts and design for all the other villages of the Capital City. This report intends to explain the planning and urban design process adopted in Amaravati Capital City through the lens of Nelapadu Village.

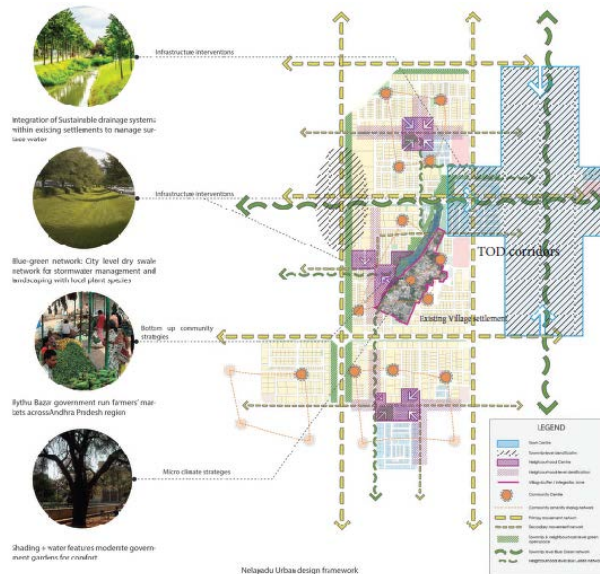


**a. Nelapadu LPS Development Plan:**



**b. Urban Design framework:**

Land Pooling Scheme development layouts play a significant role in forming the Urban fabric of the Capital city. There is a need to establish a distinct physical character, unique identity and sense of place for each of these neighborhoods. Urban Design principles and elements in areas such as Streets, Neighborhood centers, community centers and other key spaces help achieve the vision of developing a world class capital city. Few of Urban Design interventions in Land Pooling Scheme layouts include; Village Integration, Streetscape guidelines and Design framework for Urban centers etc.



**c. Village Integration:**

**Revitalization of the existing water body** to the North of the Nelapadu village as a shared open space and a vital transition space between the Village and the new layout. The Revitalized lake edge and promenade creates activities for both the Village and the New City neighborhoods. The proposed activities around the lake include walking / jogging trails, cultural event spaces, amphitheatres, kids play areas etc. This shared space would become a vital binding factor for the village and the new city.





**Neighborhood Centre design: Share amenities** such as School, Community Center, neighborhood centre which could also become economic and socio cultural assets for the Village and the New Neighborhoods. This would again encourage exchange and interaction with existing village.

Urban Centres for economic generation and active mixed use neighbourhoods



Design framework for urban centres

- Potential Multilevel parking space on the rear end of the site.
- Visually permeable courtyards and plazas allow for through pedestrian movement connecting the neighbourhood.
- Active ground floor uses contribute to public realm.
- Inclusive spaces for informal sector.
- Public plazas
- Table top crossing for safe movement

**Streetscaping:**

Pedestrian friendly environment, Encourage Non Motorized Transit, Safety, Dedicated zone (MF Zone) for surface level street infrastructure, Accommodating Pre-Planned utility corridor.



**Street hierarchy adopted in Land Pooling Scheme development layouts**

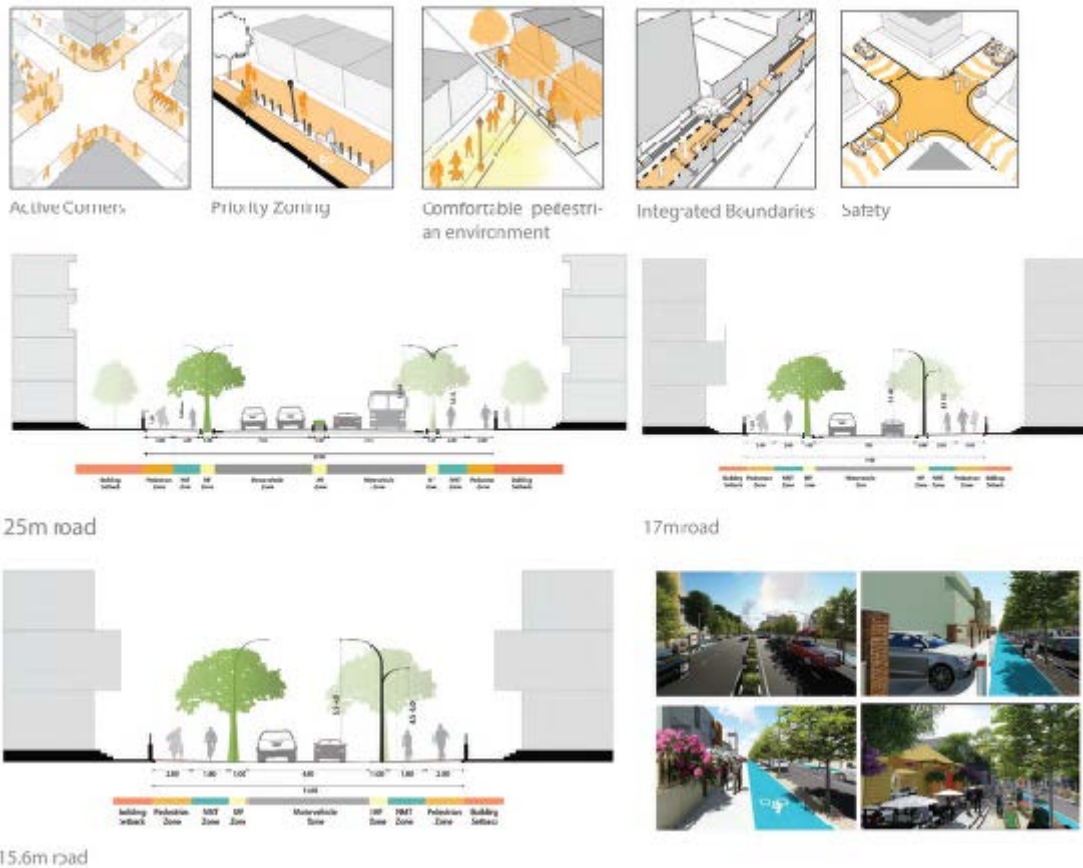
**Green Streets:** Maximize green cover to reduce urban heat island effect and minimize load on storm water drainage through sustainable drainage and material selection.

**Safe Streets:** Prioritize equal ease of use and safety for pedestrian, non-motorized and motorized vehicle users.

**Social Streets:** Ensure streets are conducive to traditional forms of public life, social meeting and mixing and informal activities and economies.

The key elements of street are Pedestrian Zone (Sidewalk), Non Motorized Zone (Cycle Track), Multi-function zone, Motorized zone (Carriage way and Service lanes), Median (Multi function zone)

### Streetscape strategies adopted in Nelapadu



### Promoting Quality of Life/ livability

The design intent in the planning of the LPS layouts and their integration with the Existing settlement has been to create a symbiotic relationship between the 'Existing' and the 'New'. A key design intent to conserve the inherent assets and character of the Existing Nelapadu Village, and thereby its quality of life.

- The existing fabric Nelapadu village would be retained, along with the necessary up gradation of Infrastructure so that it retains its identity and yet is at par with the New City in terms of urban services and utilities.
- A major existing Natural feature – the existing water body to the North of the village –would be revitalized by landscape design measure; and it would thus become a shared landscape asset for the Village and the adjacent New layout. This consolidated open space would have a variety of activities such as walking / jogging trails, gathering spaces, event spaces; and would contribute to the overall quality of life.

### Walkability & Green mobility (NMT and pedestrian)

A key consideration in the Neighborhood design for Nelapadu has been to take the 'scale of walkability' as the guiding principle. Community Centers are at 5 minute walking distance (within 400m radius) for any given plot, while Neighborhood Centers and Public Transit Corridors are at 10 minute walking distance (within 800m radius)

- The Existing Nelapadu village is inherently compact and walkable. A possible strategy to conserve the pedestrian friendly environment in the Village and to divert heavy vehicular

movement and parking requirements to the periphery of the Village settlement, so that the fabric of the village is not amputated by incipient vehicular traffic load.

- The proposed network of pedestrian pathways and Non Motorized Transportation is synchronized with the City level public transportation systems. This facilitates easy connectivity of Neighborhood level NMT with City level mobility patterns; and hence encourages people to walk and cycle.
- Street design feature and traffic calming measure are adopted to minimize conflict between pedestrian and vehicular movement, and to facilitate harmonious co-existence of the two.

### **Setting a paradigm for Greenfield urban development:**

As case of Nelapadu as explained in the proposal, shows that integrating an existing settlement is anchor to a Greenfield urban development. Rather, working with the existing settlement lends character, and helps in anchoring the new development to the physical and socio – cultural context.

This approach is being scaled to all the 29 village settlements that form the capital city thus ensuring the objective of people’s capital. After successful implementation of Land Pooling at an unprecedented scale, Amaravati Land Pooling development model is emerging as a innovative planning and development mechanism at National and International levels, for Greenfield urban development with an integrated and socially inclusive approach. Amaravati has demonstrated that a New city can be conceived while paying due consideration to the aspirations to its citizens and protecting and reinforcing existing settlements. This would serve as a **lighthouse of replicable and implementable neighbourhood planning for integration of rural/ peri-urban settlements in urban planning and management.**

This approach sets in motion a mutually beneficial relationship between the ‘Existing’ and the ‘New’, each adding value to the other. The 21st Century is the age of Urbanization, and. Inter-weaving the ‘Existing’ and the ‘New’ is the way ahead for Greenfield Urban Development.