WEBINAR SERIES ON

TRANSIT ORIENTED DEVELOPMENT IN INDIAN CITIES

Regulatory framework

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A product of WRI Ross Center for Sustainable Cities
COMPONENTS

• Institutional Setup

• Regulatory Framework

• Mapping

• Design Interventions  *(Planning & Design and implementation)*

• Financing

• Monitoring and Evaluation
GOAL

To impart understanding of the various amendments that needs to be undertaken to adopt and facilitate Transit Oriented Development (TOD) planning and implementation.
REVIEW, REVISE OR FORMULATE

- **National level: Guidance document**
  - National TOD policy – guidance document

- **State Level: Enabling through legislation**
  - Town and Country Planning Acts
  - Budgetary allocations

- **City Level: Enabling through Development Plans**
  - Master Plans/Development Plans
  - Zonal Plans
  - Local Area Plans
  - Development Control regulations
  - Budgetary allocations
NATIONAL TOD POLICY
CONTINUED….

May 2017, the Ministry of Urban Development launched the landmark National TOD policy.
VISION

• Enable Transformation
• Accessible Public Transport
• Compact Walkable Communities
OBJECTIVE

• To **promote the use of public transport** by developing high density zones

• **Mixed land-use** development which would reduce the need for travel.

• **Safe and easy movement and connectivity of NMT** and pedestrians between various uses as well as to transit stations.

• To achieve **reduction in the private vehicle ownership, traffic and associated parking demand**.

• To develop **inclusive habitat**, **integrate the Economically Weaker Sections (EWS)** and **affordable housing** in the influence zone.

• To **provide all kinds of recreational/entertainment/ open spaces** and ensure **development of safe society, prevent urban sprawl** and **reduce carbon footprints**.
DEFINITION

TOD integrates land use and transport planning and aims to develop planned sustainable urban growth centres, having with high density mixed land-use. Citizens have access **walkable and liveable communities** to open green and public spaces and at the same time transit facilities are efficiently utilized.

TOD focuses on **creation of high density mixed land use development in the influence zone of transit stations**, i.e. within the walking distance of (500-800 m) transit station or along the corridor.
PRINCIPLES
APPROACH FOR TOD IMPLEMENTATION

- **Influence Zone**: Demarcate influence zone nearly 500-800m radius of the transit station
- **High Density Compact Development**: Density and FAR norms can vary across the city
- **Mixed Use Development**: optimization of infrastructure & resources
- **Mandatory and Inclusive Housing**: minimum %age for affordable housing and provision of EWS & LIG.
- **Multimodal Integration**: High quality integrated multimodal transport system.
- **Focus on pedestrians, cyclists and NMT users**: The streets should be designed for users of all age groups and for all types of commuters
- **Street Oriented Buildings and Vibrant Public Spaces**
- **Street Vendors, Preserve Open Spaces, Safety and Security and Managing Parking**
VALUE CAPTURE FINANCING

• In TOD influence zones, land value capture can be done through enhanced or additional land value tax or one time betterment levy, development charges or impact fee, transfer of development rights (TDRs), or other such mechanisms which have been adopted in various states across the country and abroad.

• The resources generated through various mechanism should be credited into a TOD fund created for funding the infrastructure upgradation/ maintenance and development of transit corridor and public transport.
STATUTORY FRAMEWORK

- **TOD policy** should be notified as part of the Master Plan/Development plan of the city.
- The **building bye-laws and development control regulations** would need to be amended to incorporate the changes required for implementing TOD.
- The **influence zone of the TOD should be clearly notified** by the concerned authority.
- The **ULBs** and the concerned authorities/agencies should **prepare a comprehensive plan integrating** all the utilities, physical infrastructure and essential facilities such as roads, sewers, drainage, electric lines, green spaces, police post, fire post, sub-stations, etc.
- The **plan would be useful to assess the carrying capacity of the existing infrastructure and the upgradation needed** to meet the increased demand once **TOD is implemented**.
OTHER ASPECTS

• Coordination and Implementation
• Communications and Outreach
HOW TO ADOPT AND IMPLEMENT TOD?

EXAMPLES
AHMEDabad PROCESS FOR TOD
- Developed detailed knowledge of the TOD concept and its benefits

- Modified Gujarat Town Planning and Urban Development act to incorporate Local area planning process.

- The Ahmedabad Development Authority revised the Development plan to incorporate TOD and added development control regulations for the same.

- Area based development project was launched based on the TOD provisions incorporated in the Development Plan
DELHI PROCESS FOR TOD
• Developed detailed knowledge of the TOD concept and its benefits

• TOD policy was developed for incorporating in the Master Plan of Delhi – 2021.

• The Ministry of Housing and Urban affairs the then MoUD notified the TOD policy on 14th July 2015

• Delhi Development Authority incorporated the TOD policy in the revised Master Plan of Delhi – 2021 and Launched a TOD pilot project.

• First set of draft TOD regulations were released on 23rd Feb. 2016 followed by few amendments. The same are yet to be finalized.
DELHI TRANSIT ORIENTED DEVELOPMENT

POLICY & REGULATION INTERPRETATION
PURPOSE OF UNDERTAKING THIS WORK

• A graphical interpretation of the Delhi TOD Policy based on the policy and regulation documents that were available in the public domain as of October 2016.

• The manual presents a concise means to develop clear understanding of the processes, rules and regulations as defined in MPD - 2021 for facilitating TOD in Delhi.

• The manual intends to bring in a common interpretation language for various stakeholders involved in TOD implementation.
• Master Plan of Delhi 2021.
• Gazette of India – Modifications in MPD 2021 as part of review exercise Dt. 14-7-2015.
• Public Notice - Draft TOD Regulations Dt. 23-2-2016.
• Public Notice - Draft TOD Regulations. Dt. 24-4-2016.
• Public Notice - Proposed MPD 2021 Modifications Dt. 24-4-2016.

* For the purpose of following slides in this presentation.
TOD AS DEFINED BY MPD-2021

- TOD is essentially **any development, macro or micro** that is focused **around a transit node**, and **facilitates complete ease of access** to the **transit facility**, thereby inducing people to prefer to walk and use public transportation over personal modes of transport. (MPD-2021).
APPLICABILITY OF TOD POLICY

- The policy is applicable within the jurisdiction of MPD-2021 until unless specified.

Areas exempted from applying TOD

- Lutyens' Bungalow Zone, Chanakya Puri (as per layout plan of New Delhi Municipal Council, L&DO).
- Civil Lines Bungalow Area (as per layout plan of North Delhi Municipal Corporation, DDA).
- Monument Regulated Zone (As per ASI guidelines)
- Zone-O (as notified by DDA)
- Low Density Residential Area (as notified by DDA).
The approval of schemes will be granted after the approval / notification of the respective phase of MRTS
IMPLEMENTATION THROUGH TOD PRINCIPLES
PRINCIPLE 1: PEDESTRIAN AND NMT FRIENDLY ENVIRONMENT

- Street furniture
- Safe bicycle parking
- Pedestrian ramps
- Segregated and connected NMT routes
- Traffic Signals
- Refuge Area
PRINCIPLE 2: CONNECTIVITY AND NETWORK DENSITY
PRINCIPLE 3: MULTI-MODAL INTERCHANGE
PRINCIPLE 4: INDUCING MODAL SHIFT

Locate public transport stations, homes, jobs and civic facilities within easy access of each other, to incentivize walking.

Mix use

Priced private parking spaces
PRINCIPLE 5: PLACE-MAKING AND ENSURING SAFETY
PRINCIPLE 6: HIGH DENSITY, MIXED USE, MIXED INCOME
GENERIC SIMULATION
1 - SITE

4 Ha Empty Plot
2 - SURROUNDINGS

- School Plot
- Residential Area
- Bus Stop
- Metro Station
- Mall
3 - VEHICULAR GRID (250 M C/C)
4 - DESIRE PATHS

- Metro Station
- School Plot
- Residential Area
- Bus Stop
- Mall
5 - PEDESTRIAN ROUTE – 100 M C/C

- Metro Station
- Bus Stop
- Cycle Parking (PBS)
- Auto Stand (IPT)
- Mid-block Crossing
- Traffic Calming Measure
6 - LAYING OPEN SPACES AROUND PEDESTRIAN ROUTES
8 - INSTITUTIONS PLACED AROUND NMT & VEHICULAR ROUTE
9 - REST OF THE DEVELOPMENT
HOW TO ATTAIN TOD?
3 ACTORS
4 STAGES
21 STEPS

STAGE 1
Pre-approval Stage

STAGE 2
Approval for layout plan for integrated scheme

STAGE 3
Sanction for individual projects within scheme

STAGE 4
Certification
ROLES AND RESPONSIBILITIES OF STAKEHOLDERS
Delhi Development Authority (DDA)

**STAGE 1**
Pre-approval Stage

- Monitoring
- Setting up TOD fund
- Make base plans available and upload TOD status

**STAGE 2**
Approval for layout plan for integrated scheme

- Ensuring TOD scheme follows the norms
- Computerized single window clearance system
Delhi Development Authority (DDA)

Ensuring that existing movement patterns through the site are kept functional

Renew approvals

Issue completion certificate. Ensuring transaction of saleable component

Project to quality assurance checks

STAGE 3
Sanction for individual projects within scheme

STAGE 4
Certification
STAGE 1
Pre-approval Stage

Acquire land required for effectuating effective TOD

Amend any terms and conditions of the scheme and TOD Policy

STAGE 2
Approval for layout plan for integrated scheme

Examine the submitted TOD scheme, and approve once all the aspects have been met.

Specify the details of the land to be handed over to the local body (DDA)
**STAGE 3**
Sanction for individual projects within scheme

- Recover penalty from the developer entity in case of delay
- Review renewal of approvals if extension is required

**STAGE 4**
Certification

- Recover additional FAR charges.
- Ensure that existing service lanes/public roads/public drains/public parks, etc., to be retained and improved
STAGE 1
Pre-approval Stage

Developer Entity (DE)

Self-evaluate land owned to determine whether it is applicable for TOD

Apply for approval of TOD schemes to the competent authority

Pay EDC
**STAGE 2**
Approval for layout plan for integrated scheme

Prepare plans for approval

Prepare a single contiguous scheme of minimum 1 Ha based

**STAGE 3**
Sanction for individual projects within scheme

Complete construction within 5 years for projects ≤10 Ha, or within 7 years for all larger projects

Make appropriate site arrangements to ensure that existing movement patterns through the site are addressed and kept functional even during the course of construction/completion of the project.
Submit additional FAR charges and balance EDC in 4-6 instalments in order to obtain completion certificate.

Retain 50% of DUs meant for EWS housing purpose and sell remaining 50% to DDA at base cost.
21 STEPS

1. DDA delineates TOD Zone and notifies the same. DDA constitutes & notify CA.

2. CA is appointed by the concerned local bodies under their respective acts for implementation of TOD regulations.

3. CA along with assistance from DDA to prepare/ approve conceptual Influence Zone Plans (IZP)

STAGE 1
Pre-approval Stage
TOD INFLUENCE ZONE
21 STEPS

4. DDA sets up TOD Fund to be used exclusively for maintaining and upgrading the services within the TOD scheme area.

5. Applicant self-evaluates the site on a geo-spatial interface to ascertain eligibility.

6. Developer entity (DE) prepares TOD scheme based on the criteria and Obtain EIA clearance as well.

STAGE 1
Pre-approval Stage
7. DE submits scheme and other required documents

8. CA reviews and processes submitted application under computerized single window clearance system

9. Competent authority issues the approval of scheme to the DE

10. DE to pay CA, first instalment equivalent to 25% of the EDC as may be prescribed

11. Status of TOD schemes updated daily on centralized database

12. DE to complete construction within 5 years for projects ≤10 Ha, or within 7 years for all larger projects counted from the date of its issuance, failing which all approvals would need to be renewed

STAGE 2
Approval for layout plan for integrated scheme
13. Penalty is imposed on the developer entity in case of delay in completion of development; DE has to re-apply for approval.

14. In the event of non-completion of the project beyond the deadline, the validity of the given sanctions shall be deemed cancelled and re-approvals have to be taken by DE.

15. The CA shall recover the additional FAR charges and balance EDC from the DE in a staggered manner in 4-6 instalments, before the issue of completion certificate to the DE.

16. A - CA issues completion and occupancy certificate.
   B - Completion certificate can be issued for premise/building level plan within any approved phase of development, subject to obtaining the part/full completion certificate for infrastructure development works of that phase.

STAGE 3
Sanction for individual projects within scheme
17. DE can sell or transfer saleable component under its share/ownership to the prospective buyers only after the prescribed public land (roads, parking, etc) and EWS housing is handed over to the DDA.

18. The EWS housing component created by the DE shall be subject to quality assurance checks, as prescribed.

19. Monitoring mechanism for public land post handover and take appropriate penal action in case of violation of norms.

20. Surplus funds received by local body by way of EDC charges, FAR charges, auction of advertisement rights etc. received shall be invested in high interest yielding government securities.

21. Accrued interest, Public parking charges shall be used by Local body to utilize for creation, upgradation and maintenance all public amenities within TOD zone.
DEVELOPMENT CONTROL REGULATIONS (DCR) FOR TOD
LAND USE MIX

45% Mandatory Mix

30% Residential Use
5% Commercial Use
10% Community Use

55% As per Zonal Development Plan
MIX OF USES WITHIN TOD ZONE

i. Residential land use

- Residential Use: 30%
- Commercial Use: 5%
- Community Use: 10%

ii. Commercial land use

- Residential Use: 30%
- Commercial Use: 45%
- Community Use: 10%

iii. Industrial land use

- Residential Use: 30%
- Commercial Use: 10%
- Industrial Use: 55%
Amalgamation and reconstitution of the plots for planning purpose will be permitted in TOD zones
SETBACK

Plot size >3,000 up to 10,000 sq m

Minimum setback for all other edges (Rear, side) - 6m

Plot size >10,000 sq m

Minimum setback for all other edges (Rear, side) - 12m
**FAR**

Existing Scenario

Proposed Scenario

FAR: 400
Density: 2000 pph
Du/Ha: 450 DU/Ha
PARKING

100 sqm. floor area

100 sqm floor area = 1.33 ECS

Open Parking

Ground floor covered parking

Basement Parking

Multi-level with ramps

Automated multi-level with lifts
ROADS

Vehicular streets at 250 c/c

Pedestrian streets at 100 c/c

Land to be surrendered as roads / public spaces
STREET SECTIONS

45 m. Arterial Road

Similar for: 30 m Collector Road, 12 m Local Streets
20% of the area of the amalgamated plot in TOD integrated scheme (TODIS) of 4 Ha and above, shall be designated as green Public Open Space.
STREET REGULATIONS

Universal Access and Comfort and Road safety strategies

Climate Comfort

Intermediate Public Transport

Reduce Urban Heat Island Effect and Aid Natural Storm water management
GREEN BUILDINGS

The entire development has to be with minimum 3 star or gold rating as per approved rating agencies and appropriate rebate in the property tax may be applicable.
FACILITIES IN STATION AREAS
GAPS IN THE POLICY

- There are no details regarding the composition of Grievance Redressal Committee.

- Certain Development Control Regulations (DCR’s) need clarity.

- No coherence of TOD policy norms and EIA norms.

- No details of processes involved in Traffic Impact Assessment (TIA).

- No details on Transfer of Development Rights (TDR) absorption.

- Single window clearance does not take into account the external approvals like EIA. Besides, there is no mention of the timeline for granting approvals.

- EDC Instalment payment percentages vary in certain sections of the policy.
THANK YOU!