Government of India
Airports Economic Regulatory Authority of India
AERA Building, Administrative Complex, Safdarjung Airport, New Delhi

FINAL-EVALUATION REPORT

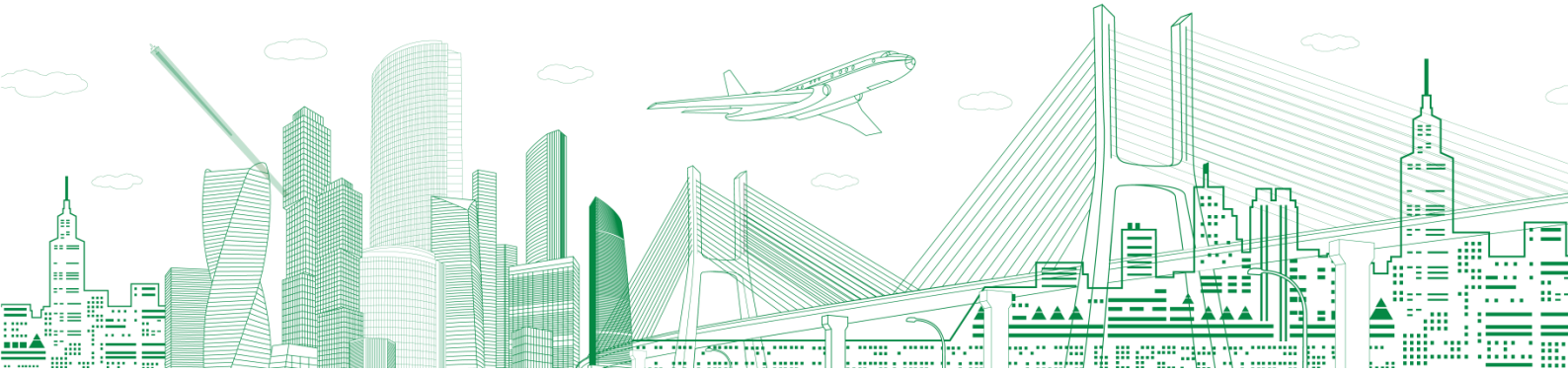
For

STUDY AND ANALYSIS OF CAPITAL EXPENDITURE PLAN PROPOSED FOR THE DEVELOPMENT, EXPANSION / UPGRADATION OF RAJIV GANDHI INTERNATIONAL AIRPORT, HYDERABAD FOR THE UPCOMING 5-YEAR CONTROL PERIOD (2026-2031).

MAY 2026

RITES
THE INFRASTRUCTURE PEOPLE

We Shape What Shapes Lives



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LIST OF ABBREVIATIONS

AAI	Airports Authority of India
ABD	Agent Based Desk
ACS	Access Control System
ACFT	Aircraft Crash Fire Tender
AERA	Airports Economic Regulatory Authority of India
AGL	Airfield Ground Lighting
ALS	Airside Landside
AMC	Annual Maintenance Cost
ARFF	Aircraft Rescue and Fire Fighting
ATM	Air Traffic Movement
ATRS	Automated Tray Retrieval System
AUCC	Airport Users Consultative Committee
BHS	Baggage Handling System
CAPA	Centre for Asia Pacific Aviation
CNS	Communication, Navigation, and Surveillance
CP	Control Period
CUSS	Common Use Self Service
D-D	Domestic to Domestic
D-I	Domestic to International
EV	Electric Vehicle
FY	Fiscal Year
GHIAL	GMR Hyderabad International Airport Limited
GoI	Government of India
GPU	Ground Power Unit
GSE	Ground Support Equipment
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IRA	Independent Regulatory Authority

LOS	Level of Service
MARS	Multiple Aircraft Ramp System
MET	Meteorological Buildings
Mn	million
MoCA	Ministry of Civil Aviation
MPPA/ mppa	Million Passenger per Annum
MTPA	Metric Tonnes Per Annum
MYTP	Multi-Year Tariff Proposal
PAPI	Precision Approach Path Indicator
PCA	Pre-Conditioned Air
PIF	Project Information File
PPP	Public Private Participation
PHP	Peak Hour Passenger
PTB	Passenger Terminal Building
RGIA	Rajiv Gandhi International Airport
SBD	Self-Baggage Drop
SMR	Surface Movement Radar
STP	Sewage Treatment Plant
SVOR	Special VHF Omnidirectional Range
TRB	Transport Research Board
UDF	User Development Fee
VHF	Very High Frequency
WPI	Whole sale price Index
XBIS	X-ray Baggage Inspection System
YoY	Year on Year

1. INTRODUCTION

1.1. Background and concession Framework

The development of the new Greenfield International Airport at Hyderabad under the PPP model was awarded to Hyderabad International Airport Limited (HIAL). A Concession Agreement between HIAL and the Ministry of Civil Aviation (MoCA) was signed on 20 December 2004. The airport was commissioned within 31 months and was initially designed to handle 12 million passengers per annum (MPPA) and 150,000 tonnes of cargo per year. As per the (PIF) Project Information File, at present, the airport's design capacity stands at 34 MPPA, while its cargo handling capacity remains 189,821 MTPA.

The airport was inaugurated on 14 March 2008 and commenced commercial operations on 23 March 2008. The Concession Agreement originally provided for a 30-year term, with an option for HIAL to extend it for an additional 30 years. This extension was exercised by GHIAL on 2 May 2022, allowing GHIAL to operate RGIA for a total duration of 60 years from the Airport Opening Date.

The Salient features of the concession agreement relevant to this report are highlighted below:

- **Nature of Agreement**

  A Concession Agreement for the Development, Construction, Operation and Maintenance of Hyderabad International Airport between the Ministry of Civil Aviation (Government of India) and Hyderabad International Airport Limited (HIAL).

- **Concession**

  The Government of India granted HIAL, the exclusive right and privilege to carry out the development, design, financing, construction, commissioning, maintenance, operation and management of the Hyderabad International Airport (excluding the right to carry out the Reserved Activities and to provide communication and navigation surveillance / air traffic management services which are required to be provided by AAI).

- **Scope of the Project**:

  Development and Construction of the Airport on the site in accordance with the provisions of the agreement, Operation and maintenance of the airport and performance of the Airport Activities and Non-Airport Activities in accordance with the provisions of the agreement, performance, and fulfilment of all obligations of HIAL in accordance with the provisions of the agreement.

- **Shareholding Pattern**

  The shareholding pattern of GMR Hyderabad Airport Limited as on date is as under:

GMR Airports Limited, Holding Company	-	74%
Airports Authority of India	-	13%
Government of Telangana	-	13%

1.2. Scope of Services

Post Inauguration in 2008, Hyderabad Airport has seen significant and sustained growth in passenger and cargo traffic, supported with the city turning into a major hub for services and technology sector. To match the rising traffic demand, GHIAL submitted an expansion plan of terminal building and Apron facility at Hyderabad International Airport to AERA for second control period (01.04.2016 to 31.03.2021). Subsequently, AERA had appointed RITES vide letter dated 12 June 2017 to examine the same. The report was submitted by RITES to AERA in Sept 2017, covering the CAPEX proposal to enhance the capacity of the Airport from 12 MPPA to 20 MPPA.

Further, GHIAL submitted a revised Capital Expenditure proposal for the combined Second and Third Control Period (01.04.2016 to 31.03.2026), for enhancing the capacity of the Airport from 12 MPPA to 34 MPPA, to AERA. AERA appointed RITES to assess this proposal and the corresponding report was submitted in April 2021.

Now, to meet the anticipated traffic growth beyond FY 2026, GHIAL has now proposed a two-part capacity expansion strategy.

a) Under the Southern Precinct, the existing terminal infrastructure is being enhanced to increase overall processing capacity from 34 MPPA to approximately 37 MPPA, enabling the airport to manage traffic efficiently in the interim period.

b) In parallel, GHIAL is developing the Northern Precinct, which includes a new integrated terminal with a capacity of 20 MPPA, a second runway, and an elevated cross-taxiway, forming the long-term expansion framework for the Fourth Control Period (FY 2026–31). The supporting traffic projections for this proposal have been prepared by CAPA, engaged by GHIAL.

The Airports Economic Regulatory Authority (AERA) has entrusted RITES Ltd. with the responsibility of evaluating the Capital Expenditure (CAPEX) proposals submitted by GMR Hyderabad International Airport Limited (GHIAL) for the Fourth Control Period (FY 2026–2031).

The scope of services assigned to RITES for the present study include-

1. Review of cost estimates, BOQ, SOR from the point of view of reasonability of cost and essentiality of various components under the capex plan in terms of sizing and scheduling vis-à-vis future air traffic projections.
2. Review and analysis of Capex plan for the specified Control Period (5 years) to be correlated / linked to the airport Master Plan / Major Development Plan/ Traffic Assessment by the Consultant.
3. Review and analysis of Capital Expenditure proposed under the CAPEX Plan for the development of the airport infrastructure in reference to AERA's Normative Benchmarks/ IMG Norms/ ICAO-IATA Norms/ Concession Agreement/ CPWD Schedule of Rates / MORTH Schedule of Rates, etc.
4. Study and review the report of Capex study already undertaken, if any, by the Airport Operator.
5. Visit to Airport, as and when required, for carrying out the onsite assessment/ analysis.
6. Assist AERA from time to time to appropriately incorporate the contents/ outcome of the report of subject assignment in the draft Consultation Paper that AERA would be issuing in the course of tariff determination of the concerned airport.
7. Assistance to AERA post completion of Assignment till the end of the control Period.

1.3. The Study Team

The following team has been formed by RITES to undertake the assignment:

Table 1 RITES Team Members undertaking the assignment

SNo.	Name	Designation
1.	Mr. R Ramkrishnan	Group General Manager, Airports
2.	Mr. Anil Aswani	General Manager, Airports
3.	Mr. Vivek Kumar	Deputy General Manager-Civil, Airports
4.	Mr. Aman Saxena	Deputy General Manager-Civil, Airports
5.	Mrs. Indira Tripathy	Senior Manager-Electrical, Airports
6.	Mr. Parvesh Yadav	Senior Technical Assistant-Civil, Airport
7.	Mr. Prasad Deshmukh	Assistant Manager (Civil), Airports

1.4. Data Collection

After various email communications between RITES, GHIAL & AERA on dates 03.12.2025, 18.11.2025, VC on 17.11.2025, the following data has been received and studied.

- Airport Expansion & Capex Proposal, Project Information File (PIF) for Airport Users Consultation, May 2025 submitted by GMR Hyderabad International Airport Limited
- General Capital Expenditure summary only for the 4th control period.
- Minutes of AUCC meetings of stakeholders held on 11.06.2025 on Airport Expansion & Capex Plan GHIAL.
- Extract of RBI Survey of Professional Forecasters on Macroeconomic Indicators – Results of the 94th Round
- Multi Year Tariff Proposal for the Fourth control period (2026-2031).
- Area allocation report post 34 MPPA expansion of Passenger Terminal Areas between Aeronautical and Non-Aeronautical Activities at Rajiv Gandhi International Airport – Hyderabad, India prepared by Meinhardt on 20.05.2025.
- Statutory Auditor's Report on Operating expenses from April 01, 2021 to March 31, 2025 in connection with Agreed-upon procedures related to Statement of allocation of Employee Benefit Expenses, Operational and Administrative Expenses into Aeronautical, Non-Aeronautical, Common and Non-Airport Expenses
- Statutory Auditor's Certificate for the period from April 01, 2021 to March 31, 2025 in connection with Agreed-upon procedures related to Revenue Accrued from Aeronautical, Non-Aeronautical and Non-Airport services.
- Statutory Auditor's report for the period from April 01, 2017 to March 31, 2024 in connection with Agreed-upon procedures related to the Capitalization of GST Input Tax credit on Civil Inputs
- Independent Auditor's Report on the Audit of Special Purpose Financial Statements for the period of 2022 to 2025.
- Statutory Auditor's report for the period from April 01, 2021 to March 31, 2025 in connection with Agreed-upon procedures related to the Billable Pax at RGI Airport.
- Statutory Auditor's report for the period from April 01, 2021 to March 31, 2025 in connection with Agreed-upon procedures related to the Billable Air Traffic Movements at RGI Airport
- Statutory Auditor's Certificate dated 15.11.2016 on Cargo Satellite Building deletion-FY16.
- Statutory Auditor's Certificate dated 25.03.2016 on revenue pertaining to non-aeronautical and other income
- Statutory Auditor's Certificate dated 25.03.2016 on summary of additions, deletions and depreciation on Cargo Satellite Building - Till FY15 (Depreciation).

- Statutory Auditor's Certificate dated 25.03.2016 on summary of additions, deletions and depreciation on Cargo Satellite Building - Till FY15 (Assets, Deletion)
- Statutory Auditor's Certificate dated 19.01.2017 on allocation of the Cargo Assets, Ground Handling, Fuel Farm assets and Non-Aero Assets – 1
- Statutory Auditor's Certificate dated 19.01.2017 on allocation of the Cargo Assets, Ground Handling, Fuel Farm assets and Non-Aero Assets – Depreciation
- Hon'ble TDSAT Judgement dated 14.02.2024 in case of RGI Airport for the Third Control Period tariff order
- RGIA master plan development for Northern Airfield.
- Project expansion Cost summary and area statement details with PO summery.
- Some lump sum details of preliminaries, insurance, Design & PMC and contingency.

1.5. Report

This report sets out the evaluation undertaken by RITES Ltd. regarding the need for expansion of the existing and development of proposed infrastructure, along with the associated capital costs at Rajiv Gandhi International Airport (RGIA), Hyderabad. This assessment has been carried out on behalf of AERA, in accordance with the scope assigned to RITES for study and analysis of CAPEX proposals submitted by GHIAL as part of its MYTP for the Fourth Control Period (FY 2026–2031). This exercise is intended to assist AERA in examining the justification, reasonableness, and regulatory admissibility of the proposed CAPEX.

The report is structured as follows:

- **Chapter 1: Introduction:** Provides a brief introduction on the scope and approach of the assignment forming the basis of report preparation.
- **Chapter 2: Proposal by GHIAL**: Elaborates on the MYTP Proposal submitted by GHIAL to AERA
- **Chapter 3: Revision of Capacity assessment of T1 as per revision to MYTP as submitted by GHIAL**: Details the revised submissions on capacity assessment of existing terminal (T1) by GHIAL
- **Chapter 4: Traffic Review**: Provides a detailed traffic review undertaken by RITES to arrive at design traffic for RGIA for 4th Control Period.
- **Chapter 5: Governing Parameters for CAPEX Evaluation**: Describes the governing parameters utilized for CAPEX Evaluation exercise.
- **Chapter 6: Evaluation of the CAPEX Proposal:** Details the evaluation of the CAPEX proposal by RITES.
- **Chapter 7: Findings:** Summarizes the finding of the evaluation of the CAPEX proposal by RITES.

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2. PROPOSAL BY GHIAL

2.1. Expansion Proposal (for 4th Control Period – FY 2026–2031)

The proposed expansion proposal submitted by GHIAL for the Fourth Control Period, as detailed in the Multi Year Tariff Proposal (MYTP), has been shared with RITES Ltd. For review and analysis. The proposed capital expenditure focuses on large-scale augmentation of Airside, Terminal, and Landside infrastructure through the development of the Northern Precinct, along with enhancements to the existing Southern Precinct. The major components of the proposed expansion are summarised below:

2.1.1. Airside Development – Northern Precinct

- ✓ Construction of a new Code-E compliant runway of 3,800 metres, equipped with CAT-I facilities.
- ✓ Development of 7,900 m of taxiways, including 4 Rapid Exit Taxiways
- ✓ Provision of 49 Aircrafts Parking stands surrounding to the Northern Passenger Terminal Building (PTB) aircraft stands and 24 Parking stands on remote aprons.
- ✓ Creation of GSE parking area of 23,400 sqm and 8.15 km of GSE movement roads.
- ✓ Construction of 34.7 km of perimeter road and associated airside ancillary buildings (ARFF stations 2 nos, ALS Boundary Wall of 15kms, gate houses 2 nos, cooling pits, engineering building, MT workshop, solid waste handling zone)
- ✓ Installation of complete Nav-Aids including AGL, PAPI, SMR, SVOR, VHF, MET hut, glidepath and localizer huts.
- ✓ Construction of new dual code-E compliant elevated Cross Taxiway (ECT) of approx. 650 m elevated portion, connecting the Northern and Southern airfields to allow integrated operations with necessary GSE movement service roads.

2.1.2. Passenger Terminal Building (Northern Terminal – 20 MPPA)

- ✓ Development of a new integrated terminal building of 225,000 sqm to handle 20 MPPA.
- ✓ Provision of:
  - ➢ 4 Entry Gates
  - ➢ 112 Check-in Counters
  - ➢ 16 ATRS lanes
  - ➢ 19 Fixed Link Bridges
  - ➢ 7 Bus Gates
  - ➢ 8 Baggage Claim Belts
  - ➢ 30 Immigration Counters

- ✓ Integrated domestic & international processing capability, designed modularly for future expansion beyond 20 MPPA.
- ✓ Provision for Retail, F&B, Duty free, Lounges, Offices areas (shell & core by GHIAL, fit-outs by concessionaires).

2.1.3. Landside Infrastructure – Northern Precinct

Landside infrastructure is planned in lines of the existing infrastructure with separate levels for departure, arrivals and ground levels.

- ✓ Development of multi-level/Surface Car Parks, Aero Plaza, EV charging stations, facilitation centres, staging areas, Ceremonial Lounge and VVIP Lounge**.**
- ✓ Construction of dual elevated departure and arrival ramps, similar to the existing Southern Precinct.
- ✓ Construction of the following buildings:

    - ➢ CNS ATM Building – 4,400 sqm
    - ➢ Landside Ancillary Buildings (AEP Office, Police Outpost, Drivers' Rest Area, etc.) – 3,000 sqm
    - ➢ Provision of Metro Facilitation Centre enabling integration with the proposed Airport Metro.
    - ➢ Grading and site preparation over 1480 acres, including 1.10 crore m^3 earthworks.

2.1.4. Other Infrastructure

- ✓ Provision of GPU / PCA systems, IT systems, telecommunications backbone, and operational systems.
- ✓ Creation of infrastructure for flight catering, GSE building, airside & landside EV charging stations.
- ✓ Development of fuel farm, airside fuel station, and space for transit/airport hotel.
- ✓ Integrated plan for Cargo Terminal 2 and related logistics in future phases.

2.1.5. Utilities (Northern Precinct)

The proposed development includes comprehensive utility infrastructure to support the Northern Precinct operations:

- ✓ Installation of a 20 MVA sub-station to meet the increased power demand of the new runway, terminal, and associated facilities.
- ✓ Provision of 2 dedicated AGL (Airfield Ground Lighting) substations for reliable power supply to navigational aids and airfield lighting systems.
- ✓ Development of a 6 km long sewage network along with a Sewage Treatment Plant (STP) to manage wastewater efficiently and sustainably.

- ✓ Implementation of an underground aircraft fuel hydrant system, designed to minimise aircraft turnaround time during peak operations. The looped hydrant network will be interconnected with the existing system, ensuring redundancy and operational resilience.
- ✓ A planned storm water drainage system, with natural grading directed towards the west.
- ✓ Runoff from apron areas will be treated through oil-water separators before groundwater recharge.
- ✓ Runoff from runway and taxiway pavements will pass through sedimentation tanks, followed by holding tanks for controlled discharge and recharge.

This fully integrated utilities network ensures operational efficiency, regulatory compliance, and resilience of the expanded airport facilities.

2.1.6. Interim Measures for Capacity Enhancement of Existing Southern Precinct (34 MPPA TO 46-47 MPPA)

To support traffic growth before the Northern Precinct becomes operational, GHIAL proposes interim upgrades:

- ✓ Multi-Level Car Park (MLCP) increasing car parking capacity from 2,600 to 5,590 slots.
- ✓ Addition of 12 new Code-C equivalent aircraft stands 09 on eastern side and 03 on western side, and conversion of (stand- 54) one Code-E stand to MARS stand, along with taxiway/taxi-lane works.
- ✓ Upgrades to BHS-BMA and transfer baggage storage Management.
- ✓ Improvement of Departure & Arrival Entry & Exit NAKA.
- ✓ Conversion from SBD to ABD (check-in island reconfiguration).
- ✓ Addition of one machine in PESC Area for D-to-D Transfer.
- ✓ Conversion of 8 swing PESC (16 Domestic, 8 Swing, 5 International) and Civil Works (Partition and DOM Movement)
- ✓ Landside traffic improvements including upgradation of terminal entry/exit points.

2.1.7. Airport Connectivity & Transport Masterplan

To ensure seamless access to both the Southern and Northern Precincts and to accommodate future traffic demand, GHIAL has proposed major connectivity upgrades as part of the Fourth Control Period. The key components include:

- ✓ Flyover (E-W on MAR 4L+4L) - Length: 700 m
- ✓ Under Pass on E-W (2L+2L) - Length: 800 m
- ✓ Under pass on MAR (4L+4L) Eastern ECT- Length: 1000 m
- ✓ Under Pass on MAR (4L+4L) Western ECT- Length: 900 m

- ✓ Under pass along East-West Road (4L+4L) - Length: 2400 m
- ✓ Under Pass Ext. along East-West Road (3L+3L) - Length: 750m
- ✓ North-South Road (3L+3L) - Length: 3500m
- ✓ 18m Road (2+2) - Length: 3100m

2.1.8. Maintenance Capital Expenditure

- ✓ Installation of 78 Body Scanners (BCAS mandate), with 16 projected each year
- ✓ New 2nd Cargo Terminal 2 (50,000 MT capacity)
- ✓ Miscellaneous statutory/business requirement works

2.2. Capital Cost Proposal

The total capital expenditure proposed for the expansion of Rajiv Gandhi International Airport during the Fourth Control Period (FY 2026–2031) has been detailed in the Project Information File by GHIAL. The proposed investments cover development of the Northern Precinct, augmentation of the existing Southern Precinct, airport connectivity works, and maintenance capital expenditure. Based on the project-wise cost tables provided in the MYTP, the combined capital requirement amounts to Rs. 13986 Crores, inclusive of design and engineering, preliminaries, insurance and permits, PMC, contingencies, and associated soft costs.

The project components as per MYTP are summarised below:

2.2.1. Southern Precinct Capacity Enhancement – Rs. 427 Crores

These works include selective upgrades to the existing passenger terminal systems, MLCP improvements, BHS/ATRS upgrades, augmentation of forecourt and kerb capacity, and other enhancement projects required to increase the Southern Precinct processing capacity from 34 MPPA to approximately 46–47 MPPA.

Table 2 Capacity Enhancement Project List Cost Breakup

Sl. No.	Asset	Total Project Cost (Rs Cr)
1	MLCP (Multi Level Car Park)	219
2	Addition of 9 Stands (Equivalent to Code C) and Conversion of 1 Code E Stand to MARS Stand on eastern side and 3 Eq code C on western side	138
3	BHS-BMA Upgrade and Transfer Baggage Storage Management	25
4	Improvement of Departure & Arrival Entry & Exit NAKA	13

Sl. No.	Asset	Total Project Cost (Rs Cr)
5	Conversion of Stand 54 to Code E/MARS Stand with Associated Works (Taxiways and Taxi lanes)	13
6	Conversion from SBD to ABD (check-in island reconfiguration)	6
7	Conversion of 8 Swing PESC (16 Domestic, 8 Swing, 5 International) and Civil Work (Partitions and DOM Movement)	6
8	Addition of One Machine in PESC Area for D-to-D Transfer	5
9	Other Miscellaneous	3
	Total	**427**

2.2.2. Northern Precinct Development Works – Rs. 11,242 Crores

This includes the development of a new 20 MPPA, Terminal Building, new runway, taxiways, aprons, airside systems, utilities, earthworks, power and AGL substations, fuel hydrant network, storm water systems, and associated soft costs. This represents the principal expansion programme for the Fourth Control Period. Additionally, this includes major road connectivity works, grade-separated structures, internal circulation upgrades, the transport master plan, and supporting civil infrastructure required for seamless access to both the Southern and Northern Precincts.

Table 3 Total estimated cost for Northern Precinct Development-Airside Works

Activity	Unit	Qty	Rate	Cost in Crores Rs.
Runway, Taxiway and Apron	Sqm	13,23,644	12,936	1,712
Elevated Taxiway	Sqm	1,53,000	46,435	710
Airside Anciliary Building	Sqm	12,000	80,966	97
Perimeter Wall	M	14,500	25,776	37
Earth Works	M3	1,10,00,000	827	910
External Utilities				194
Taxiway as emergency runway	Sqm	83,600	12,936	108
GSE Building				28
Airside Roads	lane KMS	45	1,84,94,279	83
GSE Parking	Sqm	25,000	12,936	32
Sub-total: Hard Costs				**3,913**
Preliminaries & Other cost	2%			78

Activity	Unit	Qty	Rate	Cost in Crores Rs.
Permits, Insurance etc	2%			78
Design & PMC	5%			196
Contingencies	5%			196
Sub-total: Soft Costs				**548**
Total Cost				**4,461**

Table 4 Total estimated cost for Northern Precinct Development-Landside Works

Activity	Unit	Qty	Rate	Cost in Crores Rs.
Terminal Building	Sqm	2,25,000	2,12,915	4,791
CNS ATM Building	Sqm	4,400	80,966	36
Landside Ancillary Buildings	Sqm	3,000	80,966	24
Landside Roads	Sqm	28,455	5,284	15
Dual Elevated Ramp	Sqm	25,000	46,435	116
Landscaping				67
Additional Items				
Car parking area	Sqm	1,00,000	9,545	95
IT Systems & Telecommunication				635
Operational equipment				63
External Utilities				194
Sub-total: Hard Costs				**6,038**
Preliminaries & Other cost	2%			106
Permits, Insurance etc.	2%			106
Design & PMC	5%			265
Contingencies	5%			265
Sub-total: Soft Costs				**743**
Total Cost				**6,781**

2.2.3. Airport Connectivity and Transport systems for RGI Airport – Rs. 1,015 Crores

This includes the development of a system of new Flyover and Underpass at East West Road and Main Access Road Crossing, Main Access Road Underpass, Underpass at East West Road, Widening of North-South Road and Widening of 18m Road from Southeast.

Table 5 Total estimated cost for Airport Connectivity and Transport systems for RGI Airport

Activity	Unit	Qty	Lanes	Cost in Crores Rs.
Flyover on east-west road (Main Access Road)	Meters	700	4L+4L	77.00
Under Pass on east-west road (Main Access Road)	Meters	800	2L+2L	58.00
Under pass on Main Access Road near Eastern ECT	Meters	1000	4L+4L	211.00
Under pass on Main Access Road near Western ECT	Meters	900	4L+4L	223.00
Under pass along East-West Road (4L+4L)	Meters	2400	4L+4L	181.00
Under Pass Ext. along East-West Road	Meters	750	3L+3L	81.00
North-South Road	Meters	3500	3L+3L	44.00
18m Road (2+2)	Meters	3100	2L+2L	15.00
Sub-total				**890.00**
Preliminaries & Other cost	2%			18.00
Permits, Insurance etc	2%			18.00
Design & PMC	5%			45.00
Contingencies	5%			45.00
Sub-total: Soft Costs				**125.00**
Total Cost				**1,015.00**

2.2.4. General Maintenance CAPEX Expenditure – Rs. 1,302 Crores

This includes general maintenance CAPEX Expenditure incurred on Terminal Operations, Security and Vigilance, Project, Engineering and Maintenance, Strategic Initiatives, Landscape, IT and ARFF.

Table 6 Maintenance Capital Expenditure Cost Breakup

General CAPEX for 4th CP (In Crores)	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	TOTAL Rs. Cr.
Terminal Operations	58.6	8.9	9.9	10.2	7.2	94.8
Security and Vigilance	124.7	70.6	60.5	67.2	68.7	391.7
Project, Engineering and Maintenance	175.9	99	7.5	56.3	50.8	389.5
Strategic Initiatives	103.2	15.1	6.4	3.9	2.8	131.4
Landscape	13.5	22.7	2.8	8.6	5.9	53.5
IT	47.8	51.1	41.2	28.6	28.2	196.9
ARFF	29.1	0.5	14	0.3	0.2	44.1
Total	**552.8**	**267.9**	**142.3**	**175.1**	**163.8**	**1301.9**

2.3. Summary of Proposed CAPEX (Based on MYTP)

2.3.1. Major Components Identified for capex

GHIAL has proposed the following main components:

- ✓ New Northern Terminal Building (20 MPPA) of area 2,25,000 Sqm.
- ✓ New PTB is proposed to be consisting of the 19 of passenger Fixed link bridges and 7 bussing gates, 8 baggage claims carousels, 5 check-in-islands, 112 check-in counters (including SBD), 4 entry gates for the NPTB are planned, 16 no. s of Automated Tray Retrieval System (ATRS).
- ✓ New PTB shall have Retail, F&B, Duty free, Offices and Lounge Areas wherein the shell & core are built as part of expansion, and the internal fit outs by respective concessionaires.
- ✓ IT Infrastructure for the NPTB includes Public Addressing System, Trunk Mobile Radio System, Access Control System – Airport / BCAS, CCTV – Airport Security, Information Kiosks, Speech & Siren, Digi Yatra – E Gates, Self Baggage Drop, Telephony, Mobile Phone Antenna Systems, Optical Fibre Cables for entire northern precinct, Passive / Active Network, AODB / RMS / IMS (WebSphere), MCS (Master Clock Systems), CUPPS / CUSS, BRS, FIDS and Local Departure Control System.
- ✓ As part of the landside works, ATC Technical building with 4,400 Sqm is planned for construction. And Other building i.e., AEP, Police outpost, Drivers rest area etc. with a span of 3,000 Sqm is proposed.
- ✓ New Runway (3,800 m x 45 m and Shoulder width 7.5 m on each side) Code E compliant and equipped with CAT-1 approach lighting system
- ✓ 4 nos. of Rapid Exit Taxiways.
- ✓ Taxiways (7,900 m x 23 M and shoulder width of 7.5 M on each side).
- ✓ 49 Aircraft Parking Stands surrounding the to the Northern Passenger Terminal building and 24 Parking Stands on Remote Aprons.
- ✓ Ground Support Equipment Parking area of 23,400 Sqm.
- ✓ Elevated Cross taxiway on east side of the existing terminal building & new terminal building (650 Meters, with a width of 235 meters with 20 meters reserved for drain & service road on each side, total area of elevated cross taxiway structure is 1,53,000 Sqm.
- ✓ Airside Ancillary buildings, airside roads of 45 KMS (perimeter roads, GSE roads, ARFF access roads etc.,).
- ✓ Perimeter wall and other utilities.
- ✓ Satellite ARFF Stations to meet the response time as per DGCA CAR.
- ✓ Other structures that are planned on airside include Fire Stations, boundary wall, gate houses, cooling pits, engineering building, MT workshop and solid waste handling etc.
- ✓ Earthworks (~1.10 crore m^3).
- ✓ Airport Connectivity & Transport Master Plan.

- ✓ Southern precinct upgrades from 34 MPPA to 47MPPA on the terminal side which includes Car parking, Airside Works and Terminal side works which includes MLCP (Multi Level Car Park) increase the overall car park capacity from 2600 slots to 5590 slots, EV Charging Stations, Addition of 9 Stands (Equivalent to Code C) on eastern side and 3 Equivalent code C on western side, BHS-BMA Upgrade and Transfer Baggage Storage Management, Improvement of Departure & Arrival Entry & Exit NAKA 13, Conversion of Stand 53 to Code E/MARS Stand with Associated Works (Taxiways and Taxi lanes), Conversion from SBD to ABD (check-in island reconfiguration), Conversion of 8 Swing PESC (16 Domestic, 8 Swing, 5 International) and Civil Work (Partitions and DOM Movement), Addition of One Machine in PESC Area for D-to-D Transfer 5 and Other Miscellaneous.
- ✓ Maintenance CAPEX and mandatory statutory works.

2.4. Traffic Demand Assessment (Based on CAPA Study)

The traffic study for Rajiv Gandhi International Airport (RGIA), Hyderabad for the Fourth Control Period (FY 2026–2031) has been carried out by CAPA – Centre for Asia Pacific Aviation. GHIAL appointed CAPA to undertake a comprehensive assessment of future aviation demand, including passenger, aircraft movement, and cargo forecasts, in order to establish the infrastructure requirements for the upcoming control period. The final report was prepared and submitted on 02 June 2025. Major highlights of the CAPA Traffic Study are summarized as follows:

2.4.1. Passenger Traffic Forecast

Total passenger traffic at RGIA is projected to increase from 33.1 million in FY 2025-26 to 51.5 million by FY 2030–31.

- ✓ Domestic passengers are expected to grow from 27.4 million (FY 26) to 41.2 million (FY 31).
- ✓ International passengers are expected to rise from 5.6 million (FY 26) to 10.3 million (FY 31).

Table 7 Passenger Traffic Forecast (FY 2026-2031) recommended by CAPA

FY	Domestic (Million)	International (Million)	Total Passengers (Million)	YoY%
FY 2025–26	27.4	5.6	33.1	12.1%
FY 2026–27	30.6	6.3	36.9	11.6%
FY 2027–28	33.1	7.2	40.3	9.3%
FY 2028–29	36.4	8.2	44.6	10.4%
FY 2029–30	38.6	9.3	47.8	7.4%

FY	Domestic (Million)	International (Million)	Total Passengers (Million)	YoY%
FY 2030–31	41.2	10.3	51.5	7.7%

At the growth rate indicated above, the existing Southern Terminal Precinct with a capacity of 34 MPPA (expandable to 37 MPPA) is expected to reach saturation between FY 2027–2028.

2.4.2. Air Traffic Movement (ATM) Forecast

Total ATM at RGIA is projected to increase from 2,22,609 in FY 2025-26 to 3,33,501 million by FY 2030–31.

- ✓ Domestic ATM are expected to grow from 1,90,062 (FY 26) to 2,74,391 (FY 31).
- ✓ International ATM are expected to rise from 32,547 (FY 26) to 59,110 (FY 31).

Table 8 ATM Forecast (FY 2026-2031) recommended by CAPA

FY	Total ATMs	Domestic	International
FY 2025–26	2,22,609	1,90,062	32,547
FY 2026–27	2,47,843	2,11,424	36,419
FY 2027–28	2,69,981	2,28,003	41,978
FY 2028–29	2,95,547	2,48,379	47,168
FY 2029–30	3,13,961	2,60,042	53,919
FY 2030–31	3,33,501	2,74,391	59,110

At the growth rate indicated above, the existing runway capacity of 2,51,032 movements is expected to reach saturation between FY 2029–30, necessitating the development of a second runway.

2.4.3. Cargo Forecast

As per the MYTP the Cargo Projections proposed by AERA for the 3rd Control Period i.e., from 01.04.2021 to 31.03.2026 is 189.8 (Thousand Tonnes). As per the CAPA study, total Cargo Volume at RGIA is projected to increase from 189.8 (Thousand Tonnes) in FY 2025-26 to 312.5(Thousand Tonnes) by FY 2030–31.

As per the MYTP, the cargo projections proposed by AERA for the 3rd Control Period (01.04.2021 to 31.03.2026) are 189.8 thousand tonnes. As per the CAPA study, the total cargo volume at RGIA is projected to increase from 189.8 thousand tonnes in FY 2025–26 to 312.5 thousand tonnes by FY 2030–31.

Table 9 Cargo Volume Forecast (FY 2026-2031) recommended by CAPA

FY	Domestic (thousand tonnes)	International (thousand tonnes)	Total Cargo (thousand tonnes)	YoY%
FY 2025–26	77.8	121.9	199.7	9.5%
FY 2026–27	83.1	135.7	218.8	9.6%
FY 2027–28	88.7	151.3	240.0	9.7%
FY 2028–29	94.4	167.6	262.0	9.2%
FY 2029–30	100.3	185.7	286.1	9.2%
FY 2030–31	106.6	205.9	312.5	9.2%

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3. REVISION OF CAPACITY ASSESSMENT OF T1 AS PER REVISION TO MYTP SUBMITTED BY GHIAL

3.1. Revision of Passenger Traffic Projections

Based on the internal assessment of GHIAL as per the actual traffic achieved up to January 2026, the following **revised passenger traffic projections** have been made by GHIAL:

Table 10 Revised Passenger Traffic Forecast (FY 2026-2031) by GHIAL

REVISED TRAFFIC FORECAST (GHIAL)					
S.No	**FY**	**Domestic Passenger Traffic (million)**	**International Passenger Traffic (million)**	**Total Passenger Traffic (million)**	**YOY%**
1	2026	25.8	5.7	31.5	6.8
2	2027	28.7	6.3	35.00	11.60
3	2028	32.1	7.2	39.30	12.30
4	2029	36.4	8.2	44.60	13.50
5	2030	38.6	9.3	47.90	7.4
6	2031	**41.2**	**10.3**	**51.50**	**7.5**

A detailed review of the passenger traffic projections has been undertaken and the same is available in the Chapter 4 of the Report.

3.2. Revision of T1 Capacity Assessment

As per the report submitted by GHIAL (report no: GHIAL-JAC-P-MPL-V-PDR-004 Dated 28.02.2026) with regards to Terminal 1 Capacity Assessment, the following submission has been made by GHIAL:

Improvements proposed in Existing Terminal Building:

1. Conversion of ABDs to SBDs for increased allocation
2. Swing 2 ATRs machines to Domestic
3. Swing 1 Belt to Domestic for Baggage Reclaim
4. Addition of Fast Track Immigration lanes to increase capacity
5. BMA Upgrade and Transfer Bags Storage Improvements.

The Capacity improvement expected post improvements in the existing terminal building include:

- ✓ Increase in Domestic Check-in Capacity from 4430 to 4747 in Peak Hour
- ✓ Increase in International Check-in-Capacity from 1165 to 1292 in Peak Hour.
- ✓ Increase in Domestic Security Lane Capacity from 3420 to 3800 in Peak Hour.

- ✓ Increase in Domestic Reclaim Capacity from 3080 to 3500 in Peak Hour.
- ✓ Increase in International Emigration Capacity from 1787 to 2172 in Peak Hour.
- ✓ Increase in International Immigration Capacity from 1779 to 2179 in Peak Hour.

The improvements described above will enable the existing passenger terminal building to cater to an annual traffic of 37 million passengers per annum. Based on the passenger demand projections, this traffic will be reached in FY 2027. Any further increase in annual traffic can be achieved by peak spreading and process improvements. The airport needs to add further capacity beyond 40 MPPA to meet the long-term demand.

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4. TRAFFIC REVIEW

4.1. PROJECT INFORMATION FILE OF GHIAL

The extracts of Multi Year Tarriff Proposal (MYTP) submitted by GMR Hyderabad International Airports Ltd. are as under:

- ✓ The airport presently has a design capacity of 34 MPPA and cargo handling capacity of 150,000 MTPA. During the last few years, Passenger traffic has grown from 18.3 MPPA in FY2018, to 29.5 million passengers in FY2025 (at a CAGR of 7.1%).
- ✓ RGIA has witnessed significant traffic growth in the last 3 years and is fastest growing metro airports in India. RGIA expects this growth in traffic to continue in the coming years which warrants expansion of airport infrastructure in an accelerated manner than earlier envisaged.
- ✓ Current passenger terminal building is built to process 34MPPA, the runway has 42 approved movements at present and currently handling average of 36 peak hour movements. With high-intensity operations (subject to approvals), this airside capacity can be further extended to 46 ATMs per hour. According to the CAPA study, the demand for these 46ATMs per hour is expected to be exceeded during FY28-29.
- ✓ As per revised submissions, the RGIA plans to increase its existing terminal capacity from 34 MPPA to 37 MPPA via operational and infrastructural modifications. Despite this expansion, traffic forecasts project that passenger volume will exceed the new 37 MPPA limits by the year 2030.
- ✓ In order to meet growing demand, GHIAL is proposing additional terminal capacity expansion of 20 MPPA along with second runway and cross taxiway to cater to forecasted traffic growth in its 4th Control Period (FY27-31). So, GHIAL has proposed to start developing the northern precinct by FY27, considering the nearly three-year construction timeline required for runway and passenger terminal building (PTB).
- ✓ To cater to increased traffic and requirements of night parking, total land requirement as per traffic will be 187 Apron stands as per GHIAL proposal.
- ✓ Additions of 73 Aircraft Parking stands are proposed with 49 Aircraft Parking stands surrounding to the Northern Passenger Terminal building and 24 Aircraft Parking stands on Remote Aprons.
- ✓ Capacities were balanced between the airside, terminal and landside facilities to cater to higher ultimate capacity of the existing code F runway system.

4.2. HISTORIC TRAFFIC HANDLED AT THE AIRPORT

- ✓ It has been observed that the year on year (YoY) growth rate in international passengers has declined from 9.09% in FY2018 to 8.7% in FY2025, while the domestic passenger's growth has increased from 15.13% in FY2018 to

33.01% in FY2025. For total passengers, growth remained at nearly 20% mark since 2018 till 2025. In contrast, during FY 2020-2021 major decline was observed in international as well as domestic traffic due to COVID-19.

- ✓ Domestic and international passenger handled by airport in the FY2025 are 24.4millions and 4.7millions respectively. As per this, RGIA stood as 4th ranked domestic and 6th largest international airport in India.
- ✓ In FY2025, RGIA handled about 7.1% of the total passenger handled at all airports in India, and 7 percent of the ATMs. The total Air traffic movement handled by the airport in the FY 2025 stood at 2,03,000. The international ATM handled remained at 30,000 and the domestic 173000 as against the forecast of 29000 and 170000 respectively.
- ✓ Between 2014–15 and 2024–25, RGIA's CAGR significantly outpaced the national average across all major categories—passenger traffic (10.9% vs. 8.0%), freight (5.4% vs. 3.9%), and air traffic movements (8.0% vs. 6.1%)—despite the impact of COVID-19.
- ✓ Notably, amongst the major airports, RGIA recorded the highest CAGR among all the airports for domestic passenger traffic movements.

Table 11 Growth rate at Major Airports in India (% CAGR) during 2014-15 to 2024-25

	% growth	Delhi	Mumbai	Bengaluru	Hyderabad	Cochin	Chennai	Kolkata	All India
PAX	International	4.8	3.2	7.1	5.4	3.4	2.2	2.3	4.3
	Domestic	7.7	4.6	11.2	12.4	8.3	5.6	8.0	9.2
	Total	6.8	4.2	10.5	10.9	5.7	4.6	7.2	8.0
Freight	International	5.6	3.0	6.8	6.0	-2.4	2.9	0.8	4.2
	Domestic	3.4	1.2	4.9	4.6	3.2	0.3	2.5	3.5
	Total	4.8	2.5	6.0	5.4	-1.3	2.2	1.9	3.9
Aircraft	International	2.9	1.9	5.3	5.1	2.1	1.2	1.4	3.0
	Domestic	5.1	2.1	7.5	8.6	4.6	2.9	4.9	6.8
	Total	4.5	2.0	7.2	8.0	3.4	2.5	4.4	6.1

Source: Based on data from AAI

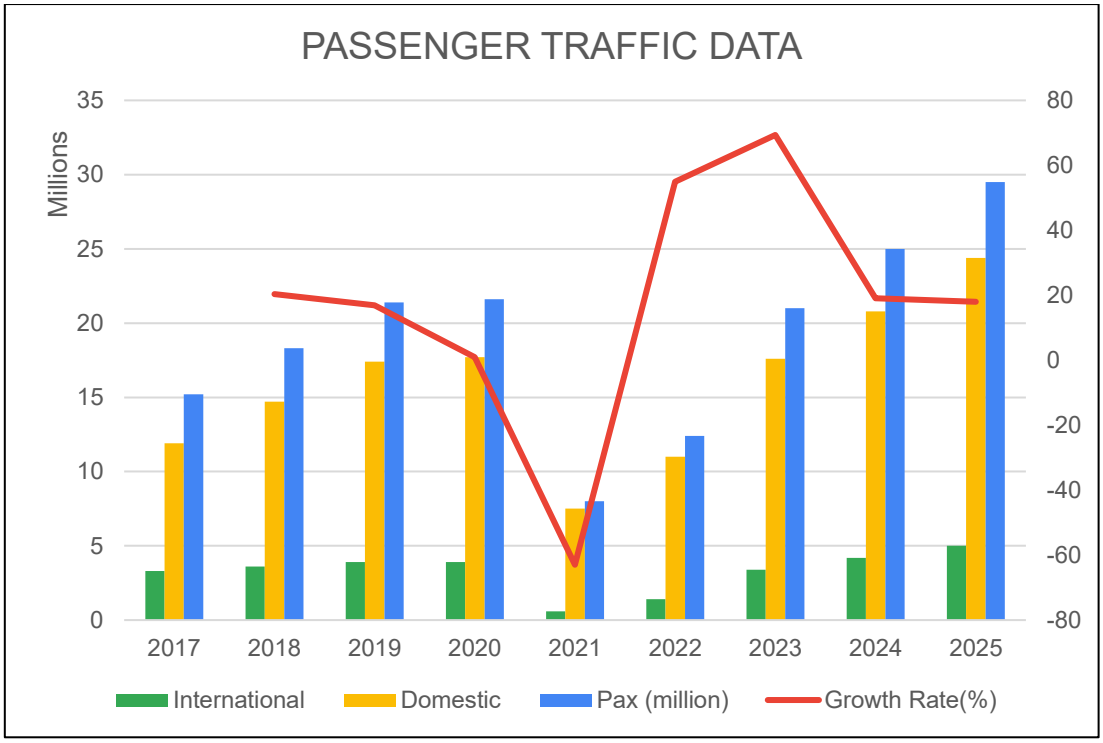


Figure 1 Historic Passenger Traffic Growth Rate

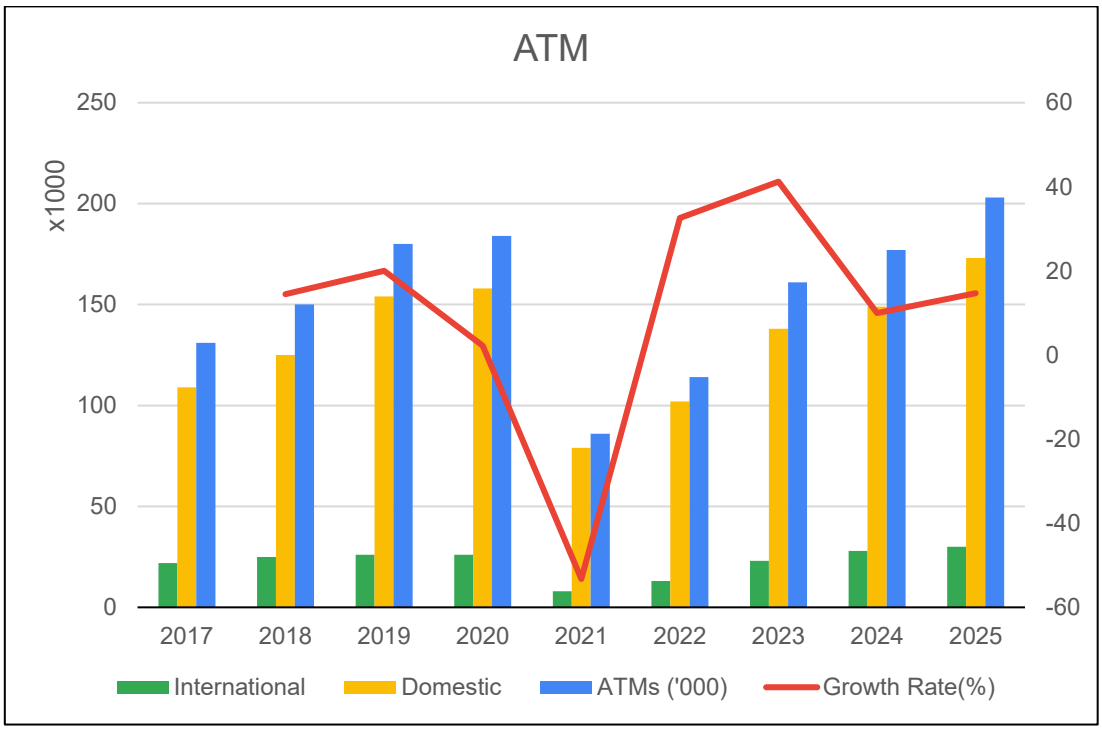


Figure 2 Historic Air Traffic Movement (ATM) Growth Rate

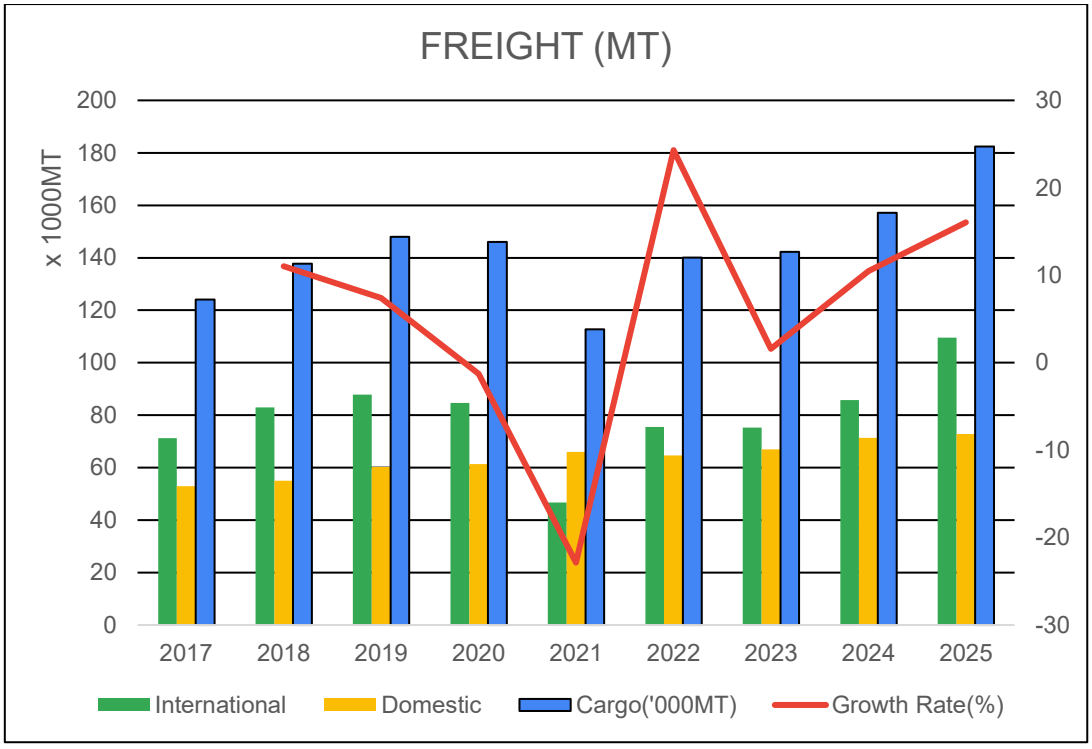


Figure 3 Historic Air Cargo Growth Rate

As per the traffic data published by AAI for FY 2026, the passenger traffic data till January 2026 has been considered for forecast of traffic for FY 2026. The comparison of the passenger traffic for Hyderabad International Airport for FY2025 and FY2026 has been reproduced below.

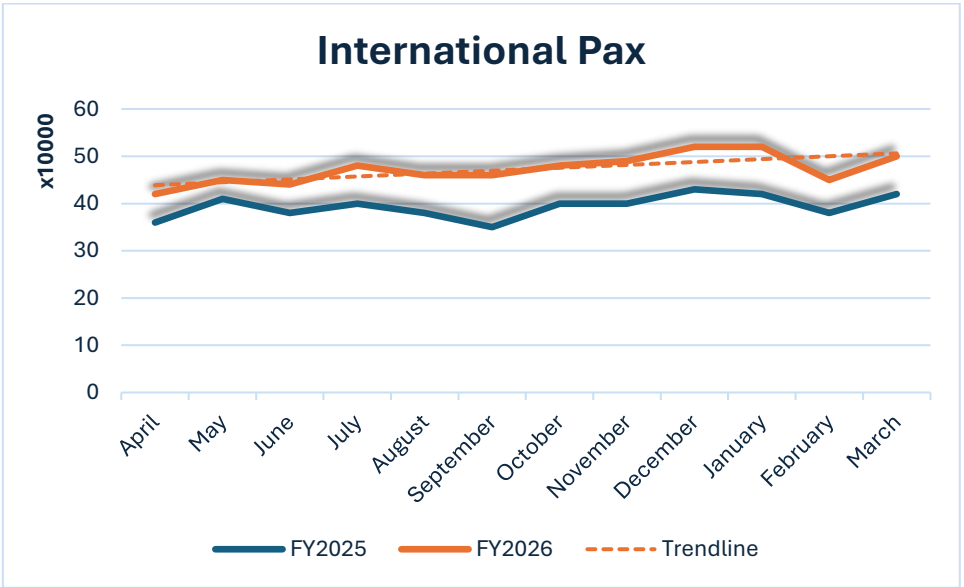


Figure 4 Comparison of International Passenger Traffic

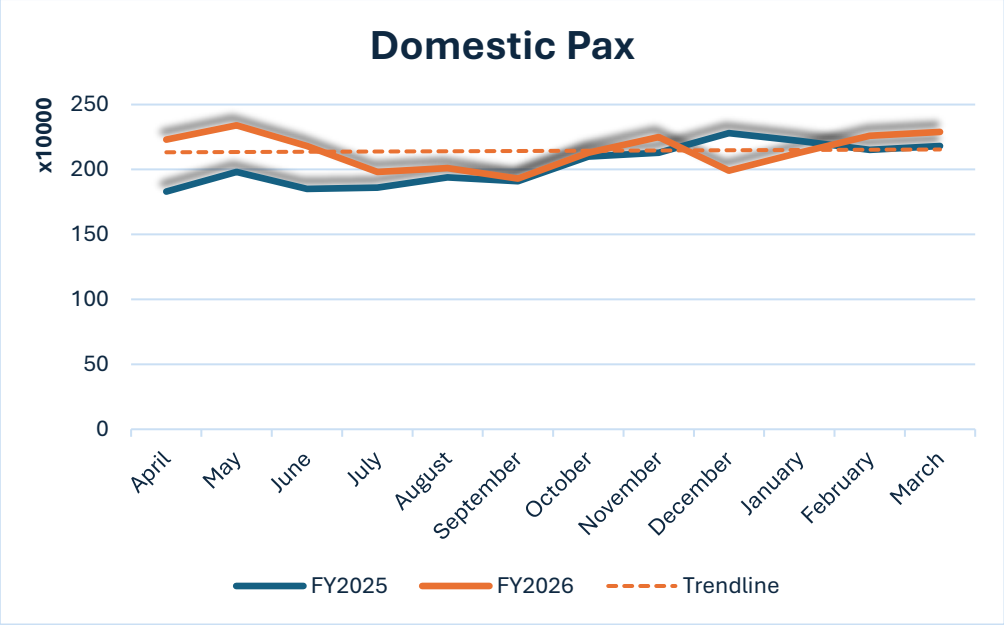
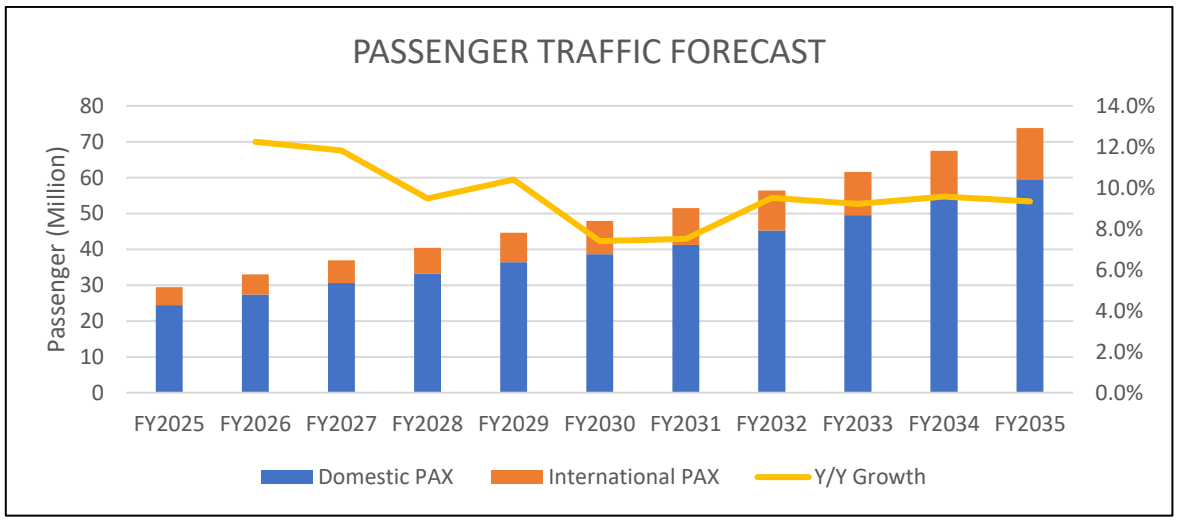


Figure 5 Comparison of Domestic Passenger Traffic

4.3. AIR TRAFFIC FORECAST BY CAPA

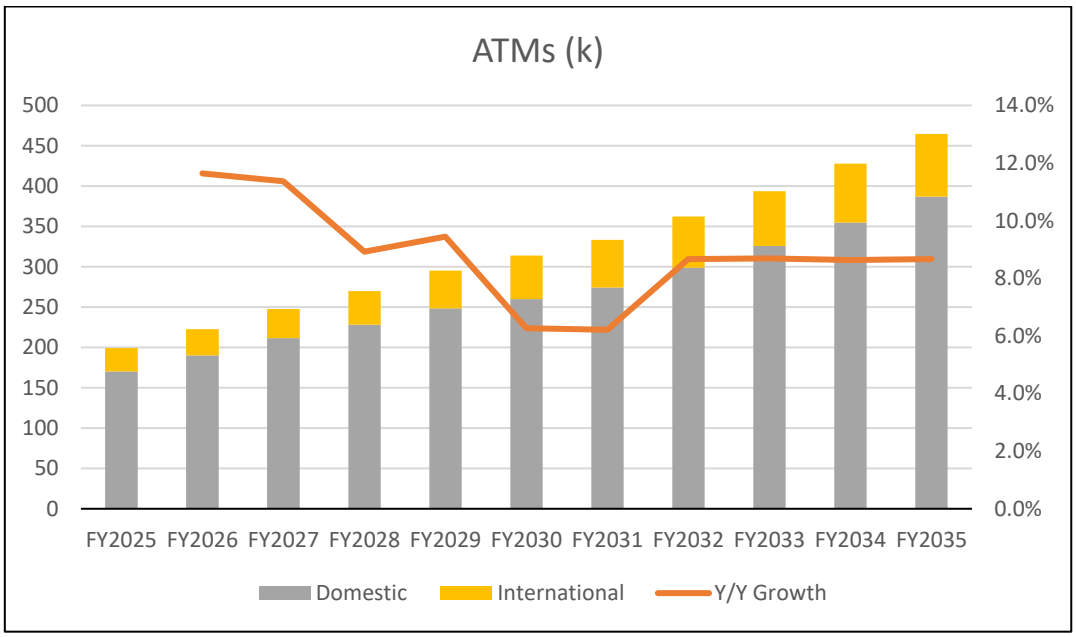
Domestic passenger traffic is forecast to grow from 24.4mn in FY2025 to 59.5mn in FY2035, at a CAGR of 9.3%. International passenger traffic is forecast to grow from 5.0mn in FY2025 to 14.3mn in FY2035, at a CAGR of 11.0%.



Source: Based on data from CAPA Traffic study

Figure 6 Air Traffic Passenger Forecast

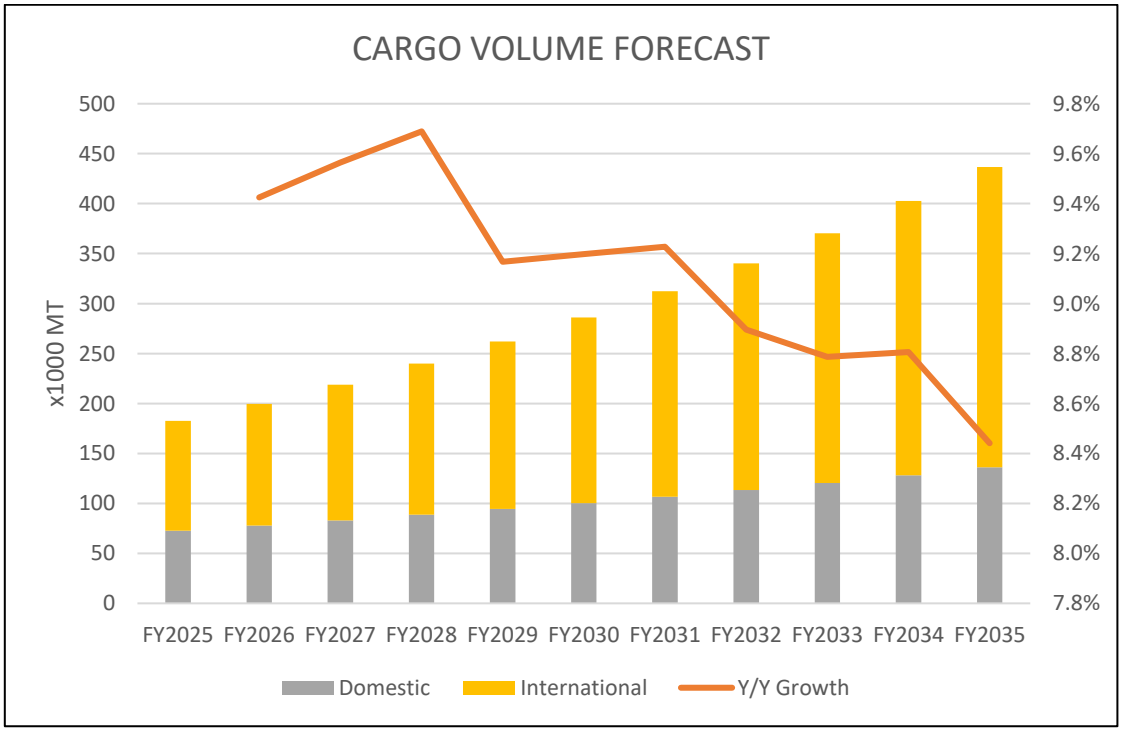
ATMs are forecast to grow from 199,349 in FY2025 to 464,947 in FY2035, at a CAGR of 8.84%. Domestic ATMs are forecast to grow from 170,123 in FY2025 to 386,807 in FY2035, at a CAGR of 8.6% and International ATMs are forecast to grow from 29,226 in FY2025 to 78,140 in FY2035, at a CAGR of 10.6%.



Source: Based on data from CAPA Traffic study

Figure 7 Air Traffic Movement Forecast

Domestic cargo volumes are forecast to grow from 72.8 thousand tonnes in FY2025 to 136.0 thousand tonnes in FY2035, at a CAGR of 6.4%. International cargo volumes are forecast to grow from 109.7 thousand tonnes in FY2025 to 300.7 thousand tonnes in FY2035, at a CAGR of 11.1%.



Source: Based on data from CAPA Traffic study

Figure 8 Air Cargo Volume Forecast

4.4. PASSENGER TRAFFIC FORECASTS FOR 4th CP (FY 2026 to FY 2031)

RITES has evaluated the passenger traffic forecasts for the 4th Control Period based on the following assumptions:

- ✓ As per IATA Global Aviation Outlook Report 2022-23, the passenger traffic at an airport has a direct multiplier effect in terms of the GDP Growth Rate.
- ✓ The Revenue Per Kilometer (RPK) is closely aligned to GDP and has a multiplier effect of 1 to 1.5 times of GDP Growth Rate.
- ✓ Hyderabad Metropolitan region is expected to grow at a compounded annual growth rate of 8.47% as per the Economic Survey 2025-26.
- ✓ The maximum passenger traffic growth rate is capped at 1.5 times of the GDP Growth Rate of Hyderabad Metropolitan region as per the Economic Survey 2025-26.

Chart XV.1: Top 10 fastest growing cities in the world 2019-35

Rank	Growth (%y/y, 2019-35)	City	GDP 2018 ($ billion, constant 2018 prices)	GDP 2035 ($ billion, constant 2018 prices)
1	9.17	Surat	28.5	126.8
2	8.58	Agra	3.9	15.6
3	8.50	Bengaluru	70.8	283.3
4	8.47	Hyderabad	50.6	201.4
5	8.41	Nagpur	12.3	48.6
6	8.36	Tiruppur	4.3	17.0
7	8.33	Rajkot	6.8	26.7
8	8.29	Tiruchirappalli	4.9	19.0
9	8.17	Chennai	36.0	136.8
10	8.16	Vijayawada	5.6	21.3

Source: Oxford Economics

Figure 9 GDP Growth Rate of Indian Cities (FY 2018 to FY 2035) as per economic survey 2025-26.

The passenger traffic for FY 2026 is calculated by projecting the traffic data available till January 2026 till March 2026 at the same rate as observed in FY 2025. The Passenger traffic for FY 2026 is calculated as follows:

Table 12 International Passenger Traffic Forecast for FY 2026

International Passenger (Million Pax)			
Month	**FY2025**	**FY2026**	**% Growth**
Apr	0.36	0.42	16.67%
May	0.41	0.45	9.76%
Jun	0.38	0.44	15.79%

International Passenger (Million Pax)			
Month	FY2025	FY2026	% Growth
Jul	0.40	0.48	20.00%
Aug	0.38	0.46	21.05%
Sep	0.35	0.46	31.43%
Oct	0.40	0.48	20.00%
Nov	0.40	0.49	22.50%
Dec	0.43	0.52	20.93%
Jan	0.42	0.52	23.81%
Feb	**0.38**	**0.43**	**13.16%**
Mar	**0.42**	**0.31**	**-26.19%**
Total for FY 2026	**4.73**	**5.46**	

Table 13 Domestic Passenger Traffic Forecast for FY 2026

Domestic Passenger (Million Pax)			
Month	FY2025	FY2026	% Growth
Apr	1.83	2.23	21.86%
May	1.98	2.34	18.18%
Jun	1.85	2.18	17.84%
Jul	1.86	1.98	6.45%
Aug	1.94	2.01	3.61%
Sep	1.91	1.93	1.05%
Oct	2.10	2.13	1.43%
Nov	2.13	2.25	5.63%
Dec	2.28	1.99	-12.72%
Jan	2.22	2.13	-4.05%
Feb	2.15	1.88	-12.56%
Mar	2.18	1.97	-9.63%
Total for FY 2026	**24.43**	**25.02**	

Table 14 Total Passenger Traffic Forecast for FY 2026

Total Passenger (Million Pax)			
Month	FY2025	FY2026	% Growth
Apr	2.20	2.65	20.66%
May	2.39	2.79	16.74%
Jun	2.22	2.63	18.13%
Jul	2.27	2.46	8.50%
Aug	2.33	2.47	6.04%
Sep	2.26	2.39	5.57%

Total Passenger (Million Pax)			
Month	**FY2025**	**FY2026**	**% Growth**
Oct	2.49	2.60	4.31%
Nov	2.53	2.74	8.20%
Dec	2.70	2.50	-7.50%
Jan	2.64	2.65	0.39%
Feb	2.53	2.31	-8.70%
Mar	2.60	2.28	-12.31%
Total for FY 2026	**29.17**	**30.47**	

The passenger traffic forecast for FY 2026 is projected till FY 2035 at the same growth rates assumed by GHIAL with a capping of maximum growth rate in any financial year at 1.5 times of average GDP CAGR. The projected passenger traffic is reported below:

Table 15 Total Passenger Traffic Forecast from FY 2026 to FY 2035

S.No	FY	Total Traffic (million)	% Growth
1	**2025**	29.17	
2	**2026**	30.47	4.46
3	**2027**	34.34	12.71
4	**2028**	38.70	12.71
5	**2029**	43.62	12.71
6	**2030**	47.62	9.17
7	**2031**	**51.19**	**7.5**
8	**2032**	56.00	9.4
9	**2033**	61.27	9.4
10	**2034**	67.03	9.4
11	**2035**	**73.33**	**9.4**

Therefore, for evaluation of the GHIAL MYTP for 4th CP, the passenger traffic considered for FY 2031 **is 51.19 million Pax against 51.5 million Pax submitted by GHIAL.**

4.5. AIR TRAFFIC MOVEMENT FORECASTS FOR 4th CP (FY 2026 to FY 2031)

The ATM forecasts for the 4th Control Period are derived as per the following approach:

- ✓ The Average PLF is calculated based on the actual Air Traffic Movements projected by CAPA Study.
- ✓ The PLF is used to recalculate the ATM's based on the Passenger Traffic Projections by RITES.

The Air Traffic Movement Forecasts are projected till FY 2035 based on the approach as above and the same is reported below:

Table 16 Air Traffic Movement Forecast from FY 2026 to FY 2035

FY	Total ATMs	Domestic	International	Considered PLF	% PLF
FY 2025–26	2,11,816	1,80,847	30,969	148	87%
FY 2026–27	2,35,366	2,00,781	34,586	149	88%
FY 2027–28	2,63,634	2,22,643	40,991	149	88%
FY 2028–29	2,93,906	2,47,000	46,906	151	89%
FY 2029–30	3,12,220	2,58,600	53,620	153	90%
FY 2030–31	**3,31,604**	2,72,830	58,774	154	91%

Therefore, for evaluation of the GHIAL MYTP for 4th Control Period, the ATM's considered for FY 2035 **is 3,31,604 against 3,33,501 projected by GHIAL.**

4.6. CHECK FOR SUPPLY SIDE CONSTRAINTS ON ATM GROWTH AS PROJECTED BY GHIAL

Based on the available fleet addition data of Indian carriers and the delivery schedule of Indian carriers based on the order book, the following supply side constraint analysis is undertaken:

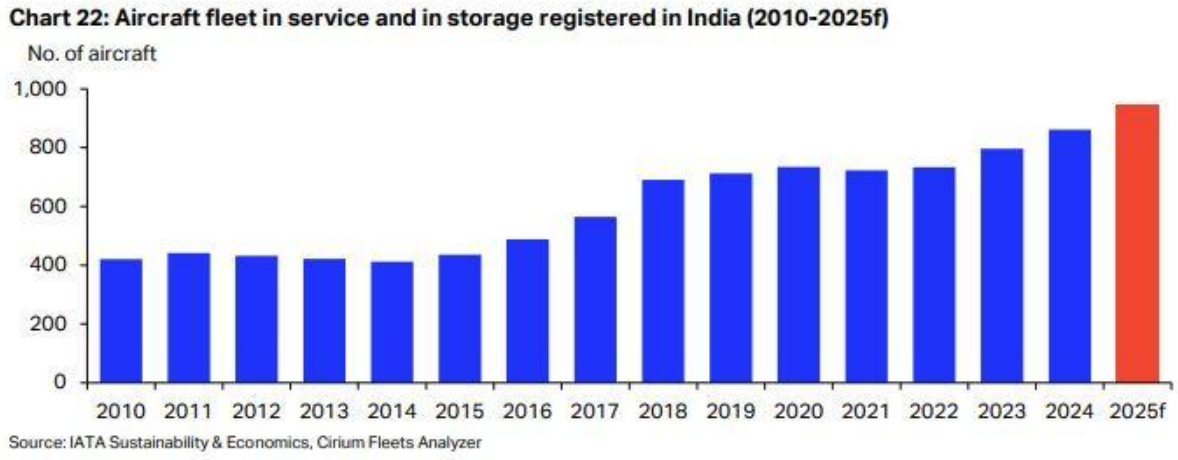


Figure 10 Aircraft Fleet Addition- Indian Carriers up to 2025

- ✓ The present fleet size of Indian Carriers is 900 in FY 2025
- ✓ The average growth in fleet size of Indian Carriers based on order book-based deliveries is 125 aircrafts per annum up to FY 2031 which translates to a CAGR of 13.89% per annum till FY 2031.

- ✓ The average PLF for Hyderabad Airport up to FY 2025 is 87.20% and the CAGR for passenger traffic growth is 9.6%.
- ✓ To sustain this passenger traffic growth, the fleet size is required to grow at a rate of passenger traffic/average PLF i.e. 11.01%.
- ✓ Since the fleet size addition by Indian Carriers is in excess of the fleet size addition required for the passenger traffic growth, there will be no fleet supply side constraint that will inhibit the passenger traffic growth.

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5. GOVERNING PARAMETERS FOR CAPEX EVALUATION

5.1. REPORT OF THE INTER-MINISTERIAL GROUP (IMG) ON NORMS & STANDARDS FOR CAPACITY OF AIRPORT TERMINALS (2009)

IMG has deliberated in detail on various key issues and made following recommendations:

A. Growth Rate for Traffic Projections

Keeping in view the trend in air traffic in last few years, a span of five years be adopted for the projects planned during the current five-year plan period, i.e., upto 2011-12. Thereafter, as the growth rate stabilizes, the span for making projections should be increased to 7 years for a more realistic assessment.

B. Target year for Capacity Creation (Design Year)

Following norms could be adopted for capacity creation:
- Smaller airports (< 5.0 MPPA) – 10th year from Planning year.
- Bigger airports (> 5.0 MPPA) – 7th year from Planning year.

C. Peak Hour Projections

Methodology given in ICAO Manual on Air Traffic Forecasting by finding ratios from historical data and recent studies be adopted. As per ICAO Manual, forecasts of peak period passengers are to be obtained from annual forecasts by applying ratios of busy period traffic to annual traffic derived from actual data at various airports.

Actual data for the past five years should be analysed to determine the Peak Hour Traffic and the trend growth thereof. Projections for the Design Year should be made based on the trend growth in the past. AAI should make arrangements for data collection of Peak Hour Traffic in respect of all non-metro Airports, so that same is available at the time of planning expansion of these Airports.

Table 17 Traffic Ratios at International & Domestic Airports in India

Sr. No.	Traffic (in MPPA)	Ratios for International Terminal		Ratios for Domestic Terminal	
		PD/AD	PH/AD	PD/AD	PH/AD
1	10.0 & above	1.15	0.15	1.10	0.10
2	5.0-10.0	1.2	0.20	1.15	0.15
3	1.0-5.0	1.3	0.30	1.25	0.25
4	0.50-1.0	1.35	0.35	1.35	0.35
5	Less than 0.5	1.45	0.45	1.45	0.45

D. Level of Services in Target Year

Level of Services 'C' as per IATA Airport Development Reference Manual (Jan 2004) denotes good service at a reasonable cost. Therefore, this level could be used for design for target demand in the design year. The unit area specified in paragraph E below represents Level of Service 'C'. Net impact of this norm would be that in the initial years; the passengers may experience LOS 'A' or 'B' and as the traffic increases LOS 'C' would be achieved.

E. Unit Area Norms

Overall space/area norm should be such as to provide a reasonable level of service for all components required in a Terminal Building. Commercial or Retail area providing amenities like food & beverages, book shops, counters for car rental, vending machines, public rest rooms etc., normally require 8-12 per cent of the overall area, and should be planned and provided accordingly. In bigger airports, i.e., with annual passenger traffic exceeding 10 million, commercial area could be upto 20 per cent of overall area. Keeping in view the IATA norms and discussion above, the norms as given in Table 4, are considered appropriate for Indian Airports.

Table 18 IMG Unit Area norms for Passenger Terminal Building generally adopted in Indian Airports

Sr. No.	Nature of Terminal	Area Norm-sqm/php
1	Domestic Terminals	
	a) Traffic upto 100 php	12
	b) Traffic between 100 -150 php	15
	c) Traffic between 150 – 1000 php	18
	d) Traffic above 1000 php	20
2	Integrated terminal for handling both domestic and international	25
3	International Terminals	27.5

F. Unit Cost of Construction

IMG recommended that the Appraisal Committee should specify the ceiling unit cost and the architects/engineers of AAI should plan and implement the project within the ceiling, subject to revision on account of increase in WPI.

G. Airports developed through Public Private Partnerships

In the case of airports developed through Public Private Partnerships, the project authorities may adopt a case-by-case approach with respect to norms relating to unit area and unit costs. Based on the judicious consideration of

international best practices and financial viability, the norms may be specified in each case prior to inviting bids for private participation.

H. WPI Inflation Data Up to FY 2026

As per the available WPI index data **(refer Annexure-1),** the WPI for FY 2022 to FY 2025 works has been worked out and reported below:

Table 19 WPI Index From FY 2022 to FY 2025

WPI Index from FY 2021 to FY 2025				
S. No	**FY**	**WPI Index Value**	**WPI Inflation**	**WPI Inflation rate adopted**
1	2021	123.4		
2	2022	139.4	12.97	7.14 *
3	2023	152.5	9.40	9.40
4	2024	151.4	-0.72	-0.72
5	2025	154.9	2.31	2.31

* The authority (in AERA's tariff order for Guwahati Airport) has observed that the financial year 2021-2022 was exceptional year due to COVID-19 pandemic, wherein the inflation rate was 12.97%. Considering the extraordinary situation, the authority has felt that the inflation rate for financial year 2021-2022 needs to be rationalized. Hence, instead of considering the inflation rate of 12.97% for financial year 2021-2022 (as per press release dated April 18, 2022, by Dept. for Promotion of Industry and Internal Trade, Government of India), the authority has considered the average rate of inflation of FY 2020-21 (1.29%) and of FY 2021-22 (12.97%) which works out to 7.14%. The authority has considered this average rate of inflation for FY 2021-22 in order to smoothen out the volatility in commodity prices caused by COVID-19 pandemic and supply side disruptions.

I. WPI Inflation forecasts as per RBI Survey of Professional Forecasters - 99th Round

As per the Report of RBI Survey of Professional Forecasters-**99th Round (refer Annexure-2),** the following values of WPI Inflation are adopted for evaluation of MYTP for the 4th CP:

Table 20 WPI Values from FY 2026 to FY 2029

WPI Values from FY 2026 to FY 2029		
S. No	**FY**	**WPI Value**
1	2026	0.9

WPI Values from FY 2026 to FY 2029		
S. No	**FY**	**WPI Value**
2	2027	4.7
3	2028	3.6
4	2029	3.6

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6. EVALUATION OF THE CAPEX PROPOSAL

6.1. Capacity Enhancements to the Southern Precinct

The existing southern precinct of the RGI Airport has scope for enhancement of its capacity to cater to the immediate requirement of the airport. As per revised submissions by GHIAL, these capex enhancements will increase the passenger processing capacity of the RGI Airport from 34 MPPA to 37MPPA on the terminal side.

Below are the scope enhancement projects proposed by the RGI Airport for the 4th Control Period:

Table 21 CAPEX- Capacity Enhancements to the Southern Precinct as proposed by GHIAL

Sr. No.	Nature of work	Project	Estimated Costs INR crores
EC1	Car Park	MLCP (Multi Level Car Park)	219
EC2	Airside Works	Addition of 9 Stands (Equivalent to Code C) on eastern side and 3 Equivalent code C on western side	138
EC3	Terminal Side	BHS-BMA Upgrade and Transfer Baggage Storage Management	25
EC4	Terminal Side	Improvement of Departure & Arrival Entry & Exit NAKA	13
EC5	Airside Works	Conversion of Stand 53 to Code E/MARS Stand with Associated Works (Taxiways and Taxi lanes)	13
EC6	Terminal Side	Conversion from SBD to ABD (check-in island reconfiguration)	6
EC7	Terminal Side	Conversion of 8 Swing PESC (16 Domestic, 8 Swing, 5 International) and Civil Work (Partitions and DOM Movement)	6
EC8	Terminal Side	Addition of One Machine in PESC Area for D-to-D Transfer	5
EC9	Terminal Side	Other Miscellaneous	3
Total			**427**

6.1.1. EC1- Multi Level Car Parking (MLCP)

Project Overview: The MLCP (Multi-Level Car Park) aims to increase the overall car park capacity from 2600 slots at present to 5590 slots, thus enhancing the parking capacity and future-proofing the airport for projected growth.

Current Scenario: At present, there are 2600 parking slots available at Hyderabad with an average occupancy of 100% during peak hours and 75% during normal hours. This indicates that a solution is needed as it directly affects operational efficiency, customer satisfaction, and the reputation of the airport due to congestion.

<u>As Proposed by GHIAL</u>

The proposed MLCP will increase the overall capacity from 2600 slots at present to 5590 slots, thus enhancing the parking capacity and future-proofing the airport for future expansions.

Below is the location of the MLCP Project:

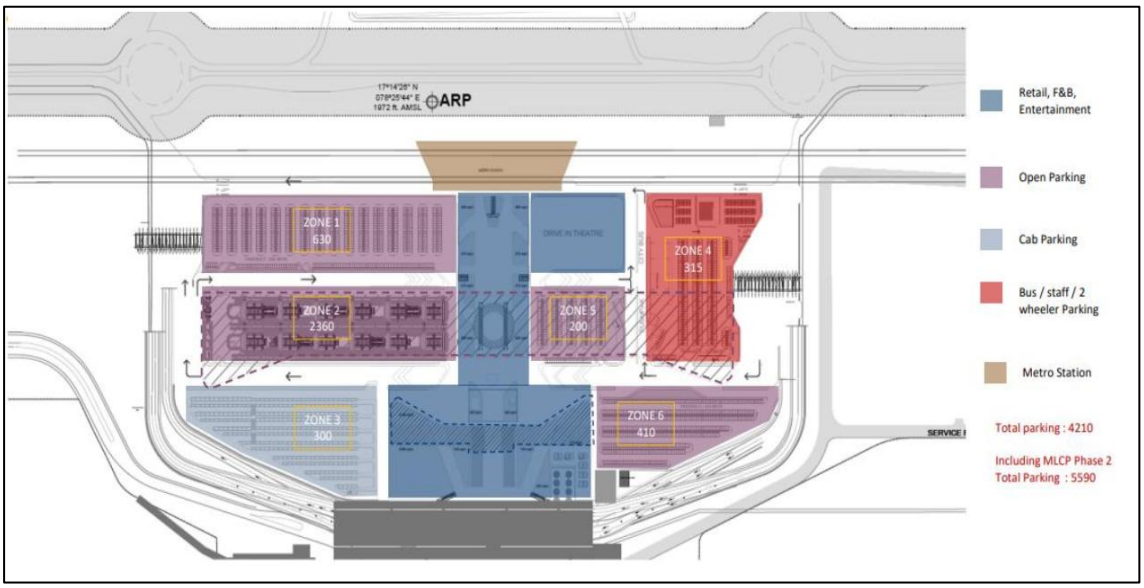


Figure 11 Proposed MLCP at Southern Precinct

The GHIAL has estimated the CAPEX based on cost per unit basis of previous work done by them and submitted their budget estimate as INR 219 Crores for MLCP.

<u>As Reviewed by RITES</u>

The design peak hour passenger traffic for the existing PTB is 4585 passengers and post improvement in southern precinct, the design capacity shall improve to 5092 passengers. This warrants an increase the area of car parking space. To augment this demand, an additional 2990 slots are proposed to be created as Multi Level Car Parking space.

Based on the report on "Setting up Multi-level Car Parking in Residential and Commercial areas" **(Placed at Annex 3)** report by the Urban Development & Urban Housing Department, RITES estimated a unit cost of **INR 7,38,461 per slot**. Consequently, the total cost for an additional 2,990 slots is projected at **INR 220.80 Crores**. Since the total cost projected by GHIAL on account of construction of MLCP is within the cost derived by RITES the same is found to be reasonable.

6.1.2. EC2 – 2. Addition of 9 Stands (Equivalent to Code C) and Conversion to 1 Code E Stand/MARS Stand on eastern side and 3 Equivalent code C on western side:

Project Overview: GHIAL plans to construct 12 new Code C aircraft stands - 10 on the eastern side and 2 on the western side. This capex will enable GHIAL to cater for more flights from remote Apron. The new 10 stands are planned to be constructed in the below location to the east side of the existing remote parking Aprons of the RGI Airport.

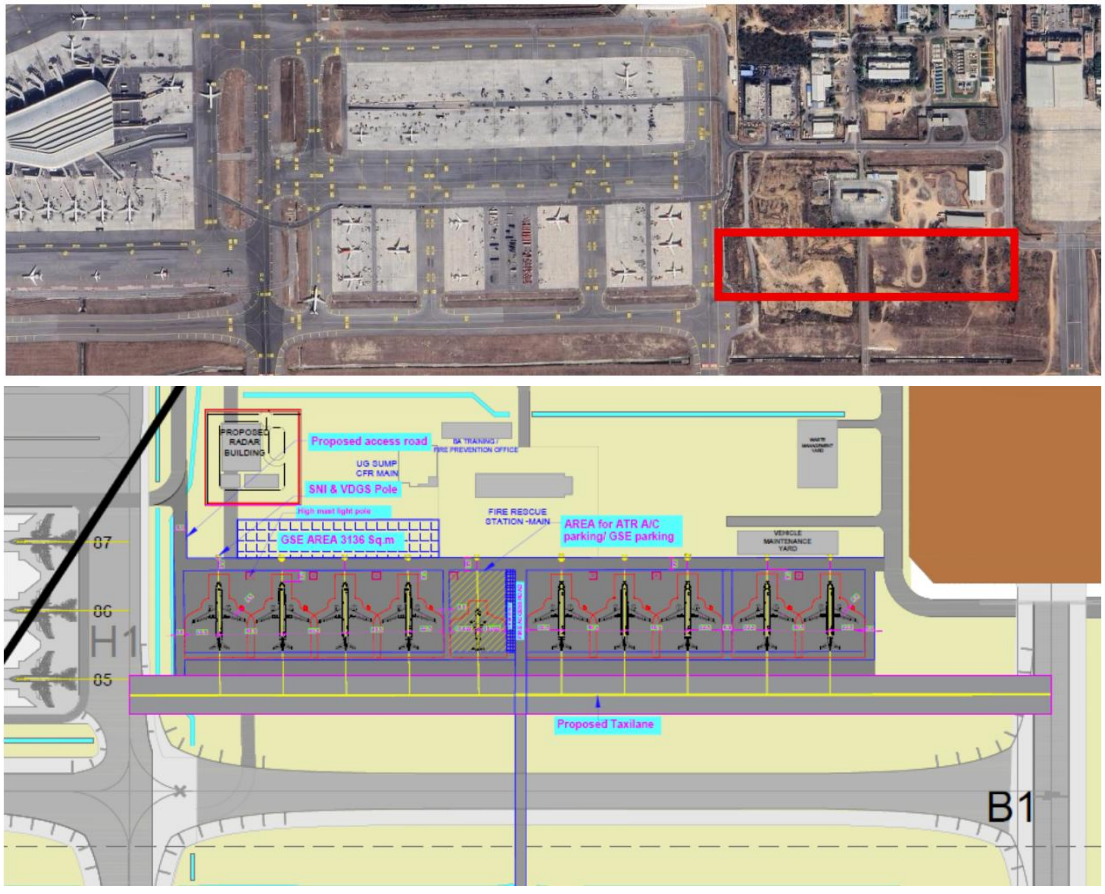


Figure 12 Proposed New stands Area at Southern Precinct

<u>As Proposed by GHIAL</u>

As per the masterplan shared by GHIAL, the total area of these 12 Aircraft Parking stands comes out to 87560 sqm.

As Reviewed by RITES

The present development at southern precinct has a stand capacity of 101 stands for a traffic of 34 MPPA. To cater to increase traffic of 37 MPPA, the additional stand requirement is calculated as follows:

Table 22 Apron Stand Requirement Calculation for Southern Precinct

APRON STAND REQUIREMENT SOUTHERN PRECINT	
Passenger Traffic (in Million MPPA)	37 (max capacity of terminal area in southern precinct)
Total ATMs	2,50,000 (max capacity of runway at southern precinct)
Domestic	213448
International	36551
Average Peak Hour ATM = Annual ATM/365/24 *1.15	33
Domestic Turnaround Time (minutes)	60
International Turnaround Time (minutes)	120
Domestic ATM in Peak Hour	29
International ATM in Peak Hour	4
Utilization Factor	0.60
Stand Demand	64
Night Parking Demand as per CP-3	84
Total Stand Requirement	148

The additional of 12 stands and conversion of 1 Code E Stand to MARS Stand shall increase the Southern Precinct Apron capacity to 114 against the stand requirement of 148 stands. Therefore, this expansion is justified and required.

The rate for pavements has been worked out as follows:

Table 23 Rate Calculation based on finalized rates for 3rd CP- Airside Pavements

Airside pavements – Rate based on finalised rates for 3rd CP				
S. No	**Parameter**	**Value**	**Unit**	**Remarks**
1	Unit Rate as per CP-3 (FY 22-FY 26)	10,517.12	Rs/Sqm	Actual Cost as per AERA Tariff Order for CP-3
2	WPI based inflation for FY 24 and FY 25	3.58	Percentage	As per Chapter 5 para 5.1 (H)
3	WPI based inflation for FY 26	0.90	Percentage	As per Chapter 5 para 5.1 (I)
4	WPI based inflation for FY 27	4.70	Percentage	As per Chapter 5 para 5.1 (I)
5	WPI based inflation for FY 28 & FY 29	3.60	Percentage	As per Chapter 5 para 5.1 (I)
6	Unit Rate for FY 25	11,283.62	Rs/Sqm	
7	Unit Rate for FY 26	11,385.18	Rs/Sqm	
8	Unit Rate for FY 27 to FY 29	12,793.99	Rs/Sqm	
Unit Rate for CP-4		**12,793.99**		

For additional 12 stands- 10 on eastern side and 2 on western side of existing remote parking apron of RGIA. Considering Additional Area of 87560 sqm to be constructed and rate of INR 12835.29 per sqm of area as per airside pavements analysis **(Refer Annexure-4**) then total cost comes out to be **INR 12793.99 *87560= INR 112.02 Crores against 138 crores claimed by GHIAL.**

6.1.3. EC3 – 3. BHS-BMA Upgrade and Transfer Baggage Storage Management

Project Overview: RGI Airport has identified the need to expand its Baggage Make-Up Area (BMA) to meet growing demand. To address this demand, approximately 700sqm of space on the domestic side and 3400sqm on the international side- both adjacent to the existing BMA- have been proposed for expansion. This will involve converting these areas into fully functional BMA zones, with an estimated cost of INR 25Crores.

As Reviewed by RITES

As per the MYTP, 4100 sqm of BMA area is required to be expanded to increase the capacity of terminal buildings from 34 MPPA to 37 MPPA. The existing BMA area 11900 sqm and post expansion of BMA Area, the total area of the BMA area will increase to 16000 sqm.
The unit rate considered by GHIAL for expansion of BMA by 4100 sqm comes out to Rs 60,976. The unit rate of building works as per CPWD PAR 2025 comes out to Rs 76,855.63 **(Placed at Annex 5). Since the unit rate is within the CPWD PAR 2025 rate, the expenditure of Rs 25 Crore on account of increase in BMA Area is justified.**

6.1.4. EC4 – Improvement of Departure & Arrival Entry & Exit NAKA

Project Overview: Comprehensive realignment of Vehicle Parking and circulation patterns is proposed. The project includes the installation of two dedicated NAKAs equipped with security features such as Under Vehicle Scanning Systems (UVSS), boom barriers, and Automatic Number Plate Recognition (AMPR) technology to ensure secure and seamless entry and exit.

As Reviewed by RITES

The realignment of Vehicle Parking and circulation patterns is required to cater to additional passenger capacity being created in the terminal building. The total cost claimed by GHIAL on account of **Improvement of Departure & Arrival Entry & Exit NAKA is 13 crores.** The total length of departure and entry kerbs is around 600 meters. The cost of road improvement works worked out in **Annex-6** is 1.84 crores per lane per km. The total length of departure kerb (3+3) lanes is 3600 meters and the total length of arrival kerb (3+3) lanes is 3600 meters. The total cost of Improvement of Departure and Arrival Entry and Exit Naka comes out to 7.2 kms *1.81 Crores = 13.03 crores. Therefore, the cost of Rs 13 Crores taken by GHIAL on account of **Improvement of Departure & Arrival Entry & Exit NAKA is found reasonable.**

6.1.5. EC5 – Conversion of Stand 53 to Code E/MARS Stand with Associated Works (Taxiways and Taxi lanes)

Project Overview: This project involves upgrading Stand Nos. 52 and 53 at RGIA from their current Code C configuration to Code E/MARS-compliant stands. To support this transformation, the apron layout and associated ground systems—including Fixed Electrical Ground Power Units (FEGPU), fuel hydrant pits, and the aerobridge ramp—will be realigned. These changes will accommodate simultaneous aircraft positioning and streamline passenger boarding processes.

Below is the location of the project where the works are planned**.**

Figure 13 Proposed Upgradation of Stand-52 and 53.

As Proposed by GHIAL

Detailed breakup of cost proposed (INR 13crores) by GHIAL in MYTP is awaited.

As Reviewed by RITES

For upgradation of stands-52 and 53 to Code E/ MARS stand, an additional area of 10898sqm to be constructed and rate of INR 12793.99 per sqm of area as per airside pavements analysis **(Annexure-4)** then total cost comes out to be INR 13.94 Crores. Therefore, the cost of Rs 13 Crores taken by GHIAL on account of **for conversion of Stand 53 to Code E/MARS Stand with Associated Works (Taxiways and Taxi lanes) is found reasonable.**

6.1.6. EC6 – Conversion from SBD to ABD (check-in island reconfiguration):

Project Overview: RGIA plans to convert 15 existing SBD units into Assisted Baggage Drop (ABD) counters, thereby increasing the overall share of ABDs and reducing congestion at check-in areas.

As Proposed by GHIAL

Detailed breakup of cost proposed (INR 6crores) by GHIAL in MYTP is not provided by GHIAL.

As Reviewed by RITES

The expenditure proposed towards converting 15 existing SBD units into Assisted Baggage Drop (ABD) counters is around 40 lakhs per counter. The area required for Assisted Baggage Drop (ABD) as per IATA ADRM is as below:

Component	Typical Requirement
Counter frontage per position	4.5–6 m
Counter depth (staff + equipment)	2.5–3 m
Passenger processing/queue area	1.2–1.5 m² per passenger
Total planning area per assisted counter	~20–35 m² per counter

The actual rate based on 3rd CP including finishing rate for Passenger Terminal Building Approved by AERA for CP-3 was Rs 137773.12 per sqm. With addition of WPI inflation up to FY 2026, this rate comes out to Rs 1,53,871.53 per sqm. The cost on account of modification of comes out to 35*15*153871.53 = Rs 8.07 Crores. **Therefore, the cost considered by GHIAL on account of Conversion of SBD to ABD is found to be reasonable at Rs 6 crores.**

6.1.7. EC7 – Conversion of 8 Swing PESC (16 Domestic, 8 Swing, 5 International) and Civil Work (Partitions and DOM Movement)

Project Overview: Following the southern terminal expansion at RGI Airport, presently, three swing gates have been operational, serving both Domestic and International passengers. RGIA proposes converting 5 more gates into swing gates within the processor area, enhancing flexibility and responsiveness to fluctuating traffic patterns.

As Proposed by GHIAL

Detailed breakup of cost proposed (INR 6crores) by GHIAL in MYTP is not provided by GHIAL.

As Reviewed by RITES

The area required for Swing Gate as per IATA ADRM is as follows:

1. Swing Gate Physical Footprint

Element	Typical Requirement
Swing gate leaf width	1.2–2.4 m
Security lane width	3–5 m
Clear circulation width	4–6 m
Staff control zone	6–10 m²

2. Total Planning Area

Configuration	Typical Area
Small swing segregation gate	20–40 m²
Medium dual-direction swing gate	40–80 m²
Large international/domestic swing zone	80–150 m²+

Considering large international/domestic swing zone, the area required for conversion of 5gates to Swing gates comes to 400 sqm.

The rate based on 3rd CP including finishing rate for Passenger Terminal Building Approved by AERA for CP-3 was Rs 137773.12 per sqm. With addition of WPI inflation up to FY 2026, this rate comes out to Rs 1,53,871.53 per sqm. The cost on account of modification of comes out to 400*153871.53 = Rs 6.15 Crores. **Therefore, the cost considered by GHIAL on account of Conversion of 8 Swing PESC (16 Domestic, 8 Swing, 5 International) and Civil Work (Partitions and DOM Movement) is found to be reasonable at Rs 6 crores.**

6.1.8. EC8 – Addition of One Machine in PESC Area for D-to-D Transfer:

Project Overview: To support the projected peak hour passenger handling capacity of 37 million passengers per annum (MPPA), RGI Airport is planning to enhance its domestic transfer infrastructure. The anticipated peak hour passenger (PHP) load for domestic transfers is estimated at 1,220 passengers.

Currently, the terminal is equipped to handle 34 MPPA with six machines at the Domestic-to-Domestic (D-D) transfer area, of which only three are functional. Based on updated capacity enhancement assessments, it is proposed to install one additional Automated Tray Retrieval System (ATRS) to support smoother operations and reduce processing time.

As Proposed by GHIAL

Detailed breakup of cost proposed (INR 5crores) by GHIAL in MYTP is not provided by GHIAL.

As Reviewed by RITES

Though, the details of cost of addition of one machine in PESC Area for D to D Transfer is not provided by GHIAL, the proposed cost of Rs 5 crores is considered based on rates of in-line XBIS and associated civil works costs in market.

6.1.9. EC9 – Other Miscellaneous

GHIAL has considered an amount of Rs 3 Crores towards miscellaneous expenditure on southern precinct enhancements.

As Proposed by GHIAL

GHIAL has considered an amount of Rs 3 Crores towards miscellaneous expenditure on southern precinct enhancements.

As Reviewed by RITES

The expenditure is not considered since no details are available for the same.

Table 24 CAPEX For Southern Precinct Enhancement Worked out by RITES

Activity	Cost in Crores (GHIAL)	Cost in Crores (RITES)
SOUTHERN PRECINCT- ENHANCEMENT WORKS		
MLCP (Multi Level Car Park)	219.00	219.00
Addition of 9 Stands (Equivalent to Code C) on eastern side and 3 Equivalent code C on western side	138.00	112.02
BHS-BMA Upgrade and Transfer Baggage Storage Management	25.00	25.00
Improvement of Departure & Arrival Entry & Exit NAKA	13.00	13.00
Conversion of Stand 53 to Code E/MARS Stand with Associated Works (Taxiways and Taxi lanes)	13.00	13.00
Conversion from SBD to ABD (check-in island reconfiguration)	6.00	6.00
Conversion of 8 Swing PESC (16 Domestic, 8 Swing, 5 International) and Civil Work (Partitions and DOM Movement)	6.00	6.00
Addition of One Machine in PESC Area for D-to-D Transfer	5.00	5.00
Other Miscellaneous	3.00	-
Total Cost	427.00	399.02

Based on the above observations, the cost towards Southern Precinct Enhancement has been worked out by **RITES as Rs 399.02 Crores.**

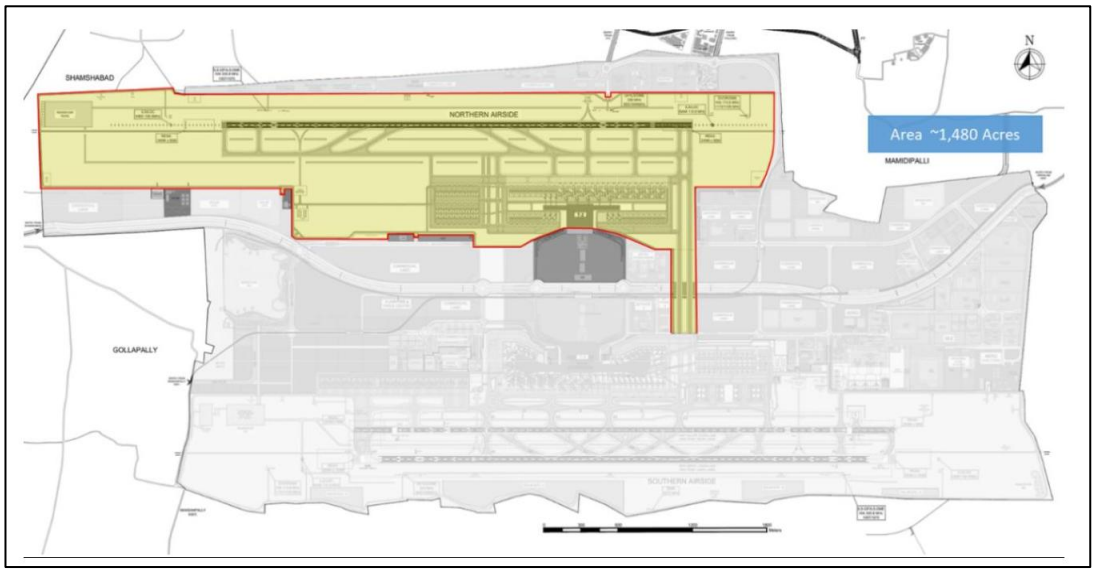
Based on the above table, the total cost toward Southern Precinct Enhancement Works is worked out to be Rs 399.02 Crores.

6.2. Northern Precinct Development

As mentioned in the MYTP proposal, the cost of built-up for the proposed Northern Precinct development has been arrived based on the estimated quantum of works. The adopted rates are stated to have been derived from historical cost data, recent contracts executed at RGIA and other comparable airports, and prevailing market prices for works of a similar nature.

6.2.1. Airside works (Runway, Taxiway, Apron, Nav-Aids) and Elevated Cross Taxiway

The proposed new runway would be towards the northern side of the existing runway. The existing northern precinct is not yet developed for construction and thus, GHIAL needs to execute the earthwork completely. Currently the northern precinct is at lower level and will require to fill earth. The site grading plan will be in compliance with DGCA CAR and ICAO SARPs. Site preparation works in an area of about 1480 acres and the area is shown below:



Source: Based on MYTP

Figure 14 Northern Precinct Area to be developed

The Airside works comprise of a new runway, taxiways, apron, and other airside infrastructure. The proposed works by GHIAL towards the airside development are as follows:

- ✓ Runway with a width of 45 M and shoulder width of 7.5 M on each side and length of 3,800meters. The new runway is proposed to Code E compliant and equipped with CAT-1 approach lighting system. Nav-aids such as AGL, PAPI, SMR, SVOR, VHF, MET hut, glidepath huts and localizer huts are planned as part of expansion works.
- ✓ 4 nos. of Rapid Exit Taxiways

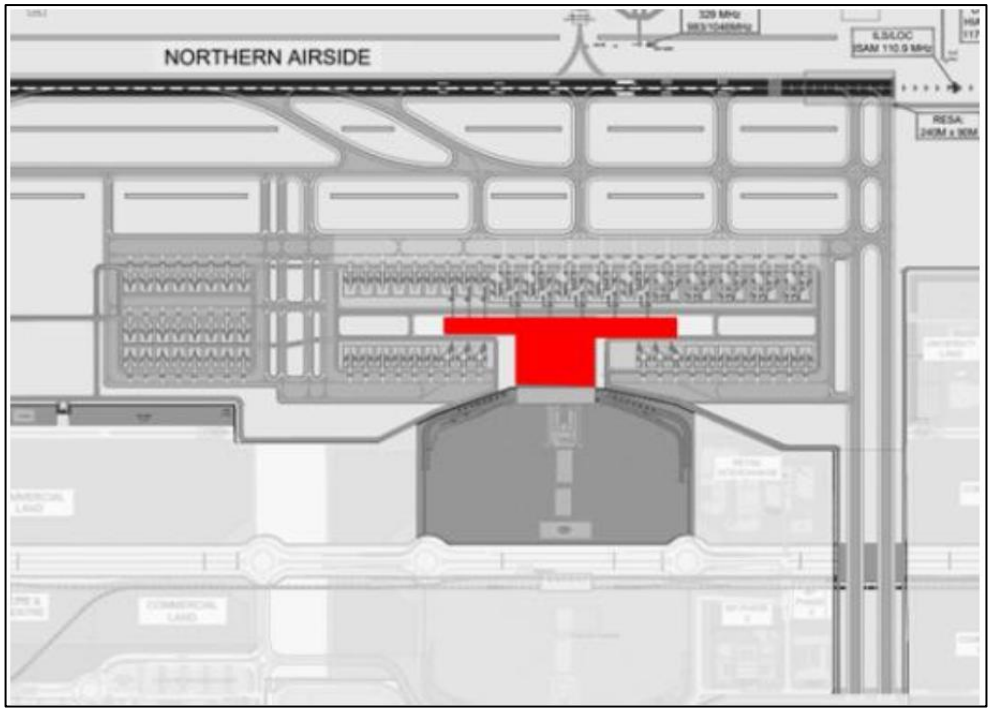
- ✓ Taxiways with a width of 23 M and shoulder width of 7.5 M on each side and length of more than 7,900 meters.
- ✓ 49 Aircraft Parking Stands surrounding the to the Northern Passenger Terminal building and 24 Parking Stands on Remote Aprons.
- ✓ Ground Support Equipment Parking area of 23,400 Sqm
- ✓ Elevated Cross taxiway on east side of the existing terminal building & new terminal building. The dimensions of elevated cross taxiway are 650 Meters, with a width of 235 meters with 20 meters reserved for drain & service road on each side, 51/43.5 meters object to centre line separation distance and 83.5meters distance between the taxiway-to-taxiway centre line. The total area of elevated cross taxiway structure is ~ 1,53,000 Sqm.
- ✓ Airside Ancillary buildings, airside roads of ~ 45 KMS (perimeter roads, GSE roads, ARFF access roads etc.,)
- ✓ Perimeter wall and other utilities.
- ✓ Satellite ARFF Stations to meet the response time as per DGCA CAR
- ✓ Other structures that are planned on airside include Fire Stations, boundary wall, gate houses, cooling pits, engineering building, MT workshop and solid waste handling etc.

Table 25 Various Structures on the Airside

Name	Units	Quantity
ARFF Stations	No.	2
ALS Boundary wall	Kms	15
Gate House	No.	2
Cooling pit	No.	1
Engineering Building	No.	1
MT workshop	No.	1
Solid Waste handling	No.	1

6.2.2. Northern Passenger Terminal Building (NPTB)

The proposed new northern passenger terminal building would be towards the northern side of the existing terminal building. While the ultimate capacity of the current terminal building is visualized to be 37 MPPA, the proposed development is taken up for a terminal building that can handle 20 MPPA to address growing traffic at RGIA. Proposed location of NPTB as follows:



Source: Based on MYTP

Figure 15 Northern Passenger Terminal Building (NPTB)

The proposed works towards the NPTB for 20 MPPA are as follows:

- ✓ NPTB with a size of 2,25,000 Sqm is proposed to be constructed by GHIAL in the 4th Control Period.
- ✓ NPTB is proposed to be consisting of the 19 of passenger Fixed link bridges and 7 bussing gates.
- ✓ NPTB is proposed to be consisting of the 8 of baggage claims carousels
- ✓ A total of 5 check-in-islands are proposed with 112 check-in counters (including SBD).
- ✓ 4 entry gates for the NPTB are planned
- ✓ 16 no. s of Automated Tray Retrieval System (ATRS) is proposed for the NPTB for 20 MPPA.
- ✓ Similar to previous developments, the terminal shall have Retail, F&B, Duty free, Offices and Lounge Areas wherein the shell & core are built as part of expansion, and the internal fit outs are carried out by respective concessionaires.
- ✓ IT Infrastructure for the NPTB includes Public Addressing System, Trunk Mobile Radio System, Access Control System – Airport / BCAS, CCTV – Airport Security, Information Kiosks, Speech & Siren, Digi Yatra – E Gates, Self Baggage Drop, Telephony, Mobile Phone Antenna Systems, Optical Fibre Cables for entire northern precinct, Passive / Active Network, AODB / RMS / IMS (WebSphere), MCS (Master Clock Systems), CUPPS / CUSS, BRS, FIDS and Local Departure Control System.

- ✓ Commensurate to the capacity, landside development is also planned to be taken up. Landside infrastructure is planned in lines of the existing infrastructure with separate levels for departure, arriving and ground levels (for car park access). MLCP / Surface car park will be developed. Considering the modern trends, EV charging stations, accessibility to metro connectivity etc, are planned.
- ✓ As part of the landside works, ATC Technical building with ~ 4,400 Sqm is planned for construction.
- ✓ Other building i.e., AEP, Police outpost, Drivers rest area etc. with a span of ~ 3,000 Sqm is planned for construction.
- ✓ Roads & Pavements: Departure Ramp and Arrival Ramp similar to the existing southern terminal.
- ✓ Other facilities around the NPTB include Ceremonial lounge, VVIP Lounge, EV Charging Points, Staging Areas, Facilitation Centres, Metro Facilitation Centre & connectivity.

  This expansion aims to enhance the functionality and efficiency of the precinct, ensuring that all necessary facilities are in place to support its growth and operations.

Utilities required for operation of the NPTB are as follows:

- ✓ Utilities include a sub-station with a capacity of 20MVA, and 2 AGL substations. Additionally, a sewage network spanning 6 kilometres and a sewage treatment plant are included to manage waste effectively.
- ✓ An underground fuel hydrant system is planned to fuel the aircraft. The hydrant is sized to minimize the turnaround time during the saturation phase. The hydrant system will be looped and connected to the existing network for resilience.
- ✓ The storm water network for the airfield, the natural grading is towards the west, run-off from aprons will be treated at the oil water separators before recharging. The run-off from runways and taxiways will pass through the sedimentation tanks before the holding tanks / recharge.

6.2.3. Airport Connectivity and Transport systems for RGI Airport

The aim of the plan is to ensure seamless, efficient, and scalable ground transport connectivity for both passengers and cargo in line with future traffic growth projections.

<u>Proposed Infrastructure Interventions (4th Control Period):</u>

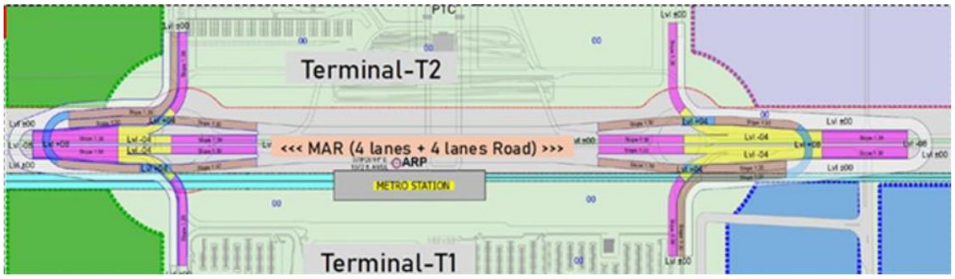
- ➢ **Flyover and Underpass (at EW Road and MAR crossing):** The Flyover and Underpass at the East–West Road and Main Access Road crossing are essential components of the future-proofing strategy for the airport's

transportation infrastructure. Currently, this Intersection is at-grade type which performs adequately but as the airport is continues to expand and development of new terminal, will result in significant increase in traffic at this section. To maintain efficient traffic flow and ensure safety, the junction will require double-grade separation—a flyover and underpass—to accommodate the future surge in vehicle volumes and prevent congestion, ensuring that the airport's access infrastructure is future-ready to handle the demands of an expanding airport. Layout of the proposed project is presented in Figure below:

Source: Based on MYTP

Figure 16 Proposed Layout of Flyover and Underpass

- **MAR Underpass (4 lanes+ 4 lanes):** The widening of the existing 4-lane road to a 4-lane + 4-lane configuration is necessary to address both current and future traffic demands at the airport. Due to the planned Cross Taxiways, the road must be lowered to a minus-1 level to facilitate smooth, grade-separated passage for both vehicular traffic and aircraft operations.



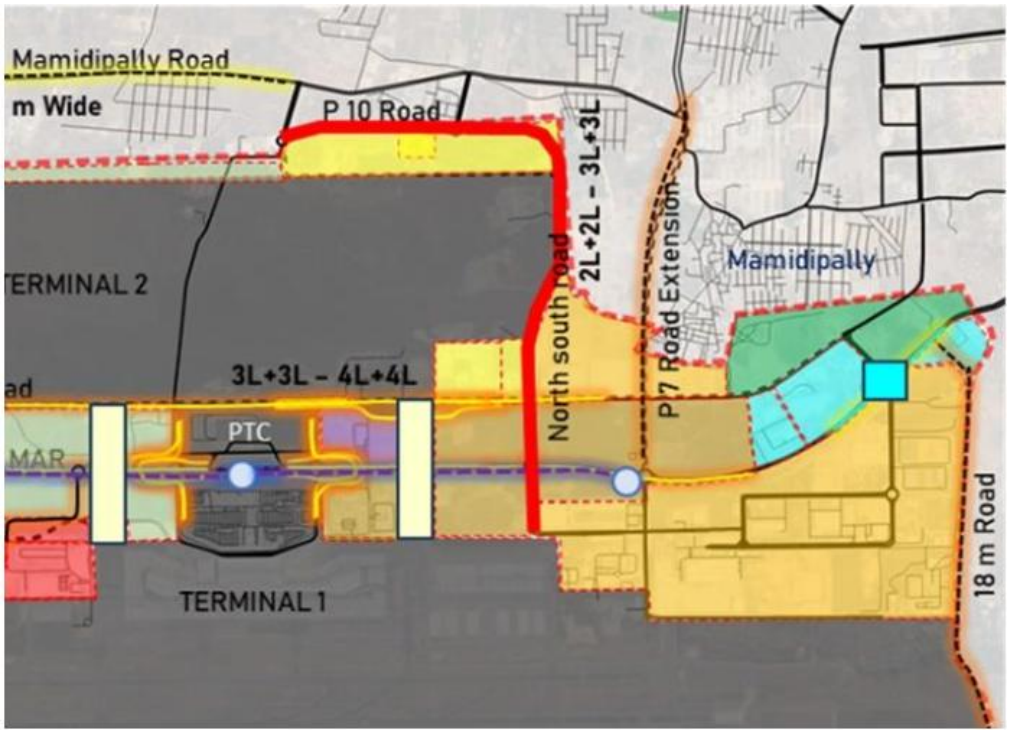
Source: Based on MYTP

Figure 17 Proposed Layout of MAR Underpass

- **East–West Road & Underpass (4 lanes + 4 lanes):** The East–West Road, which currently operates as an at-grade corridor, serves as a key connector for areas located to the north of the airport's main access road. As part of the future airport development plan, this road will need to be reconfigured

to an underpass to enable seamless and grade-separated movement segregating it from the future T2 road network, Cross Taxiways and airside operational zones. Additionally, to accommodate projected increase in traffic volume, the road must be widened to a 4-lane + 4-lane configuration.

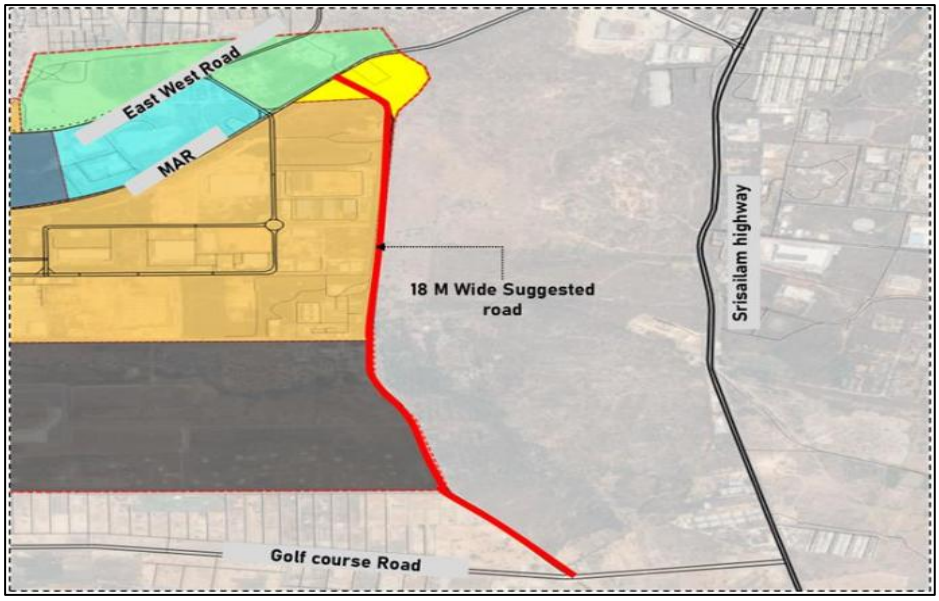
- **Widening of North–South Road (3 lanes + 3 lanes):** The widening of the North–South Road to a 3- lane + 3-lane configuration shall be a critical infrastructure improvement aimed at addressing both current traffic demands and future growth of the airport.



Source: Based on MYTP

Figure 18 Proposed Layout of Widening of N-S Road

- **Widening of 18-meter Road from the South East:** The proposed widening of 18-meter-wide road shall be a crucial intervention for the airport's infrastructure, providing a direct entry from the southeast side, which will bypass two critical junctions on the 'Srisailam Highway' that often experience heavy congestion. This new route will alleviate pressure on these high-traffic areas, improving overall traffic flow and reducing delays, particularly during peak hours while supporting the airport's growth and ensuring a better travel experience for all users.



Source: Based on MYTP

Figure 19 Proposed Layout of Widening of 18M Road from the South-East side

6.3. CAPACITY ENHANCEMENT REQUIREMENTS

6.3.1. Northern Passenger Terminal Building

GHIAL has submitted its proposal for the construction of new Terminal building at Northern Precinct of area 2,25,000 sqm for 20MPPA passengers during 4th Control Period. The area of 2,25,000 sqm which was submitted by GHIAL to AERA for consideration in MYTP computation appears to in line with the area required as per IATA norms as it comes around 30-35 sqm per Peak hour passenger for integrated terminal which is as per the area as generally adopted for Indian Airports as per IATA norms.

Methodology:

Capacity of New Passenger Terminal Building at Northern Precinct= 20 MPPA
Proposed Area of Passenger Terminal Building at Northern Precinct as per MYTP = 2,25,000 sqm
As per IATA ADRM, Exhibit 2.3.8.6.3g, the Peak Hour Passenger Traffic is calculated as follows:

Annual Passengers	Typical Peak Hour Factor
10–200 MPPA	0.035%

Peak Hour Passenger= 20*10^6*(0.035)% = 7000

Unit Area Per Peak Hour Pax = 225000/7000 = 32.14 sqm

The expansion is justified based on the Unit Area per Peak Hour Passenger (PHP) metric, at 32.14 sqm per PHP, this aligns with approved standards at comparable facilities, such as the Jewar (Noida) and Navi Mumbai International Airports. For reference, the Navi Mumbai International Airport operates with an approved Unit Area of 34.03 sqm per PHP, which is calculated based on a Passenger Terminal Building area of 231,354 sqm and have capacity of 20MPPA which is designed to accommodate 6,745 peak-hour passengers. Similarly, the Jewar International Airport is being developed to handle a capacity of 12 MPPA, with a Passenger Terminal Building area of 137,985 sqm.

6.3.2. AIRSIDE EXPANSION

GHIAL submitted its proposal for construction of Runway, Taxiways and Aprons of combined area of 13,23,644 sqm in Northern precinct. GHIAL proposed 49 Aircraft Parking Stands surrounding the to the Northern Passenger Terminal building and 24 Parking Stands on Remote Aprons. Presently RGIA has 101 stands, and also intends to add another 13 stands as part of the Southern Precinct Enhancement. Therefore, the total number of stands including the current proposal for 4th control period will be 187 stands.

Methodology:

Considering total peak hour ATM of 44 in the 2031 year with total peak hour ATMs of 37 domestic and 7 international aircraft. Assuming the turnaround time for aircrafts, 60 minutes for domestic flight and 120 minutes for international flight. The approximate aircraft stand requirement for the design year works out as under:

Required Number of stands (G)

$$G = \frac{V * T}{U}$$

Where,

V= Peak Hour ATMs

T= Aircraft Turnaround Time, Hour

U= Utilization Factor

Taking the Utilization factor of 0.60, two additional stands (One each for domestic and international apron) as stand-by and Night parking demand of 84 aircrafts as per Control Period-3.

Number of stands (G) = Number of stands required for domestic aircrafts movements (G_D) + Number of stands required for international aircrafts movements (G_I)

Number of stands required for domestic aircrafts movements (G_D):

G_D=37x1/0.6 = 61.66 =62 stands

Number of stands required for international aircrafts movements (G_I):

G_I=7x2/0.6= 23.33 =24 stands

G= G_D + G_I +4 redundant stands =90 stands (2 stands redundant considered at each of the apron locations in northern and southern precinct respectively).

Incremental night landing demand is assumed as = 13 stands (Roughly 15% of incremental demand)

Total number of stands= G+ Night parking demand = 90+84+13 =187 stands

Thus, the total aircraft stand demand of 187 (101 present, 73 proposed and 13 stands for incremental night landing) projected by GHIAL is considered reasonable.

6.4. THE CAPITAL COST PROPOSAL

The capital cost proposal has been submitted by GHIAL by adopting the following methodology:

- GHIAL has submitted proposal for 4th control period (FY2026-31) expansion to AERA for cumulative capital cost ₹13,986Cr.
- GHIAL has submitted a detailed cost proposal split into sub-sections, with specific line items listed for each part of the project work.
- For the purpose of justification of cost for 4th control period, GHIAL has considered their rate per unit area for Terminal Building & Airside Area enhanced by escalation factor of 5.80% for inflation and market dynamics over the approved unit rates by AERA for the 4th control period instead of detailed estimate.
- GHIAL has bifurcated its estimate majorly in three parts over northern precinct and southern precinct capacity enhancement. Northern Precinct development comprises of Airside works (Runway, Taxiways, Aprons, Nav-Aids) including Elevated Taxiway, Terminal Building and Landside works (Roads, External Utilities, Car Park etc).
- Lump sum details of Preliminaries, permits &Insurance, design, PMC, and contingencies is also given.

RITES remarks on the methodology adopted by GHIAL to evaluate the CAPEX:

- As per the AERA normative approach order No. 07/2016-17 issued on dated 13/06/2016, The Airport operator is expected to determine cost as per publicly available standard like CPWD norms for scheduled items and market rate analysis for non-schedule items. This is not followed by the GHIAL in this 4th Control Period expansion proposal.
- Through the above issued lump sum estimates, it is not possible to work out the exact contents and extent of work.
- In the view of above, RITES has evaluated the 4th Control period proposal based on actual rate for 3rd Control Period approach and Detailed rate approach.
- **Rate based on finalised rate for 3rd Control Period:** Utilizes previously evaluated rates from the third control period, adjusted for inflation using the Wholesale Price Index (WPI).
- **Detailed Approach:** Involves a detailed estimate for each line item to derive a per-square-meter (sqm) rate / per-meter (m) rate / per-cubic-meter (m^3) rate, which is then applied to the quantities proposed against line item in the Multi-Year Tariff Proposal (MYTP).

6.4.1. CAPEX Costs Towards Northern Runway & Associated Airside Works

AS PROPOSED BY GHIAL

The GHIAL has estimated the CAPEX based on cost per unit area of approved rate instead of detailed calculation-

- For the Runway, Taxiway and Aprons works, GHIAL has considered the ongoing work-Bravo Taxiway contract awarded to M/s Megawide Infrastructure India Private Ltd. (P.O. No: 5000018972) in October, 2024 and worked out per sqm rate as hard cost with addition of 5.80% per annum escalation factor from April 2025 to September 2026 for inflation and market dynamics.

  Total Rate proposed per unit area = ₹12,936 per sqm

  Total cost of Runway, Taxiway and Apron for 13,23,644 sqm= ₹12936 x 13,23,644 = ₹1,712 Cr.

- For Elevated Taxiway, GHIAL has considered the similar work has been executed in Delhi airport in 2023 and worked out per sqm rate as hard cost with addition of 5.80% per annum escalation factor for inflation and market dynamics.

  Total Rate proposed per unit area = ₹46,435 per sqm

  Total cost of Elevated Taxiway for 1,53,000sqm= ₹46,435 x 1,53,000= ₹710 Cr.

- For Airside Ancillary Building, GHIAL has considered the CNS ATM building works executed in March, 2022 and worked out per sqm rate as hard cost with addition of 5.80% per annum escalation factor for inflation and market dynamics from April,2022 to September,2029.

  Total Rate proposed per unit area = ₹80,966 per sqm

  Total cost of Airside Ancillary Building for 12,000sqm= ₹80,966 x 12,000= ₹97Cr.

- For Perimeter Wall, GHIAL has given the cost based on their internal estimate.

  Total Rate proposed per unit meter = ₹25,776 per meter

  Total cost of Perimeter Wall for 14,500m= ₹25,776x 14,500= ₹37Cr.

- GHIAL determined the Earthworks rate by averaging two recent tenders. This includes a 2024 order at 801 INR/m^3 and the most recent order (No. 5000021147) at 860 INR/m^3. The final adopted rate of 827 INR/m^3 accounts for anticipated volume discounts due to the large scale of this project.

  Total Rate proposed per unit cum = ₹827 per cum

  Total cost of Earthworks for 1,10,00,000cum= ₹827 x 1,10,00,000 = ₹910Cr.

- For External Utilities, GHIAL has considered 4% of CAPEX based on experience at another airport as a hard cost and for purposes of allocation cost split equally between airside and terminal. Refer GMR Goa International Airport (GGIAL) order- 117 Cr for utilities against a hard cost of 2695 Cr, 4.34%. Current capex- 9951 cr. 4% - 398 cr.

  Total cost of External Utilities = ₹194Cr.

- For Taxiway as Emergency Runway, GHIAL has considered the ongoing work-Bravo Taxiway contract awarded to M/s Megawide Infrastructure India Private Ltd. (P.O. No: 5000018972) in October, 2024 and worked out per sqm rate as hard cost with addition of 5.80% per annum escalation factor from April 2025 to September 2026 for inflation and market dynamics.

  Total Rate proposed per unit area = ₹12,936 per sqm

  Total cost of Taxiway as Emergency Runway for 83,600sqm= ₹12,936 x 83,600= ₹108 Cr.

- For GSE Building, GHIAL has proposed 2500sqm building considered including painting workshop, equipment shop etc. Rate based on GGIAL GH order (1300sqm GSE building @ 12.56 Cr) in 2023.

  Total cost of GSE Building = ₹28Cr

- For Airside Roads, GHIAL has derived the rate from P.O. No 5000021147 issued on October 2025, rate is ₹4,309 per sqm and rate considered for the current evaluation is ₹4,109 per sqm and this work translated to ₹1,43,50,000 per lane per km and the same adjusted at the rate 5.80% per annum escalation factor for inflation and market dynamics.

  Total Rate proposed per km = ₹1,84,94,279

  Total cost of Airside Roads for 45 km= ₹1,84,94,279 x 45= ₹83 Cr.

- For GSE Parking, GHIAL has considered the ongoing work-Bravo Taxiway contract awarded to M/s Megawide Infrastructure India Private Ltd. (P.O. No: 5000018972) in October, 2024 and worked out per sqm rate as hard cost with addition of 5.80% per annum escalation factor from April 2025 to September 2026 for inflation and market dynamics.

  Total Rate proposed per sqm = ₹12,936 per sqm

  Total cost of GSE Parking for 25000sqm= ₹12,936 x 25000= ₹32 Cr.

- Sub-total of Hard cost towards Northern Runway & associated airside works is ₹3,913Cr.

- For Soft costs component, GHIAL considered as follows:
  i. Preliminaries & Other cost: 2% of Hard cost
  ii. Permits, Insurance etc.: 2% of Hard cost
  iii. Design & PMC: 5% of Hard cost
  iv. Contingencies: 5% of Hard cost

- The total Capex costs towards Northern Runway & associated works is ₹4,461Cr.

Table 26 Details of item-wise Capex Costs as per GHIAL towards Northern Runway & associated airside works is tabulated below:

Sr. No	Activity	Unit	Qty	Rate	Cost (Cr.) Rs.
1	Runway, Taxiway and Apron	Sqm	13,23,644	12,936	1,712
2	Elevated Taxiway	Sqm	1,53,000	46,435	710

Sr. No	Activity	Unit	Qty	Rate	Cost (Cr.) Rs.
3	Airside Anciliary Building	Sqm	12,000	80,966	97
4	Perimeter Wall	M	14,500	25,776	37
5	Taxiway as emergency runway	Sqm	83,600	12,936	108
6	GSE Building				28
7	Airside Roads	lane KMS	45	1,84,94,279	83
8	GSE Parking	Sqm	25,000	12,936	32
9	Earth Works	M3	1,10,00,000	827	910
10	External Utilities				194
	Sub-total: Hard Costs				**3,913**
11	Preliminaries & Other cost	2%			78
12	Permits, Insurance etc	2%			78
13	Design & PMC	5%			196
14	Contingencies	5%			196
	Sub-total: Soft Costs				**548**
	Total Cost				**4,461**

The phasing of the cost of the project is as follows:

Table 27 Phasing of Capex Costs towards Northern Runway & associated airside works

Capex Phasing	Cost in INR Crores			
	FY 27	FY 28	FY 29	FY 30
Opening works in progress	-	1,073	2,334	3,802
Works during the year	1,073	1,261	1,467	659
Commission of Assets				4,461
Closing works in progress	**1,073**	**2,334**	**3,802**	**-**

AS REVIEWED BY RITES

The cost of Northern Runway and associated airside works has been reviewed/scrutinized in the same way as GHIAL has calculated and is summarized below.

RITES has calculated the inflation based on the Wholesale Price index (WPI) released by Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry in India on monthly. In this calculation, RITES has considered different rates based on WPI based inflation are as follows 3.58% up to FY25, 0.90% for FY2026, 4.70% for FY 2027 and 3.60% for FY2028 to 2029.

RITES has evaluated the 4th Control period proposal based on actual rate based on 3rd Control Period and Detailed rate approach. In actual rate finalised for 3rd Control Period, utilizes rates as per AERA Tariff order for 3rd Control Period and duly adjusted for inflation using the Wholesale Price Index (WPI). In Detailed Approach, involves a detailed estimate for each line item to derive a per-square-meter (sqm) rate / per-meter (m) rate / per-cubic-meter (m^3) rate, which is then applied to the quantities proposed against line item in the Multi-Year Tariff Proposal (MYTP).

- **Total cost for Runway, Taxiways and Aprons is as follows:**

  As per Rate based on actual cost according to 3rd Control Period **(Refer Annexure-4)**

  Basic rate as per 3rd Control period (AERA Tariff order) = ₹10,517.12 per sqm

  Add WPI based inflation@3.58% upto FY2025= ₹766.50 per sqm

  Add WPI based inflation@0.9% for FY2026= ₹101.55 per sqm

  Add WPI based inflation@4.70% for FY2027 and 3.60% for FY 2028 and FY2029= ₹1408.81 per sqm

  Total Unit Rate per sqm= ₹10,517.12+₹766.50+₹101.55+₹1408.81= ₹12,793.99 per sqm

  Total cost for line item-Runway, Taxiway and Apron= **1323644 sqm x ₹12793.99 = ₹1693.47 Crores**

- **Total cost for Elevated Taxiway is as follows:**

  Since no rates are available in 3rd Control Period, cost has been estimated based on MoRTH Project Cost Sheet and the unit rate calculated is Rs 46,400 per sqm. **(Refer Annexure-7)**

  Total cost for Elevated Taxiway = **1,53,000 sqm x ₹46400 = ₹709.92 Crores**

- **Total cost for Airside Anciliary Building is as follows:**

  Since no rates are available in 3rd Control Period, cost has been estimated based on CPWD PAR 2025 and the unit rate calculated is Rs 76,855.63 per sqm. **(Refer Annexure-5)**

  Total cost for Airside Ancillary Building= **12000 sqm x ₹76,855.63 =₹92.23 Crores**

- **Total cost for Perimeter Wall is as follows:**

  Since no rates are available in 3rd Control Period, cost has been estimated based on CPWD DSR 2023. In this, quantities are calculated using both master plan

and google earth and CPWD DSR 2023 are inflated to construction year using WPI based inflation rate. The unit rate calculated is Rs 26175.41 per running meter **(Refer Annexure-8)**

Rate from Detailed Estimate = ₹26175.41 per meter

Total cost for line item-Perimeter Wall= **14500 meter x ₹26175.41 = ₹37.95 Crores**

Since the cost claimed by GHIAL on account of Perimeter Wall is ₹37 Crores against the cost of ₹37.95 Crores determined by RITES, therefore the cost claimed by GHIAL on account of Perimeter Wall of ₹37 Crores is considered reasonable.

- **Total cost for Earthworks is as follows:**

The quantity of the earthwork is calculated from available Google Earth Data.

Table 28 Earthworks Calculation Using Google Earth Data

S.No	Parameter	Value (ft)	Value (meters)	Reference Document
1	Existing Threshold 09R	1971 Ft	600.76	AIP
2	Existing Threshold 27 R	2026 Ft	617.52	AIP
3	Distance Between Existing Runway and New Runway		2150	GHIAL Masterplan
4	Maximum Permissible Threshold Level at 09 End on New Runway		600.76	
5	Maximum Permissible Threshold Level at 27 End on New Runway		617.52	
6	Average Gradation Levels		609.14	
7	Earthwork Volume in Cut Worked out from Google Earth OGL's	1,00,07,715.92		
8	Earthwork Volume in Fill Worked out from Google Earth OGL's	1,21,20,376.41		
9	Average Cut and Fill Volume	1.105 crore cum Therefore, the quantum of Earthwork assumed by GHIAL as 1.10 crore cum is found to be reasonable and is taken for calculation of CAPEX		

Since no rates are available in 3rd Control Period, cost has been estimated based on CPWD DSR 2023. In this, quantities are calculated using both master plan and google earth and CPWD DSR 2023 are inflated to construction year using WPI based inflation rate. The unit rate calculated is Rs 677.14 per cum **(Refer Annexure-9)**

Rate from Detailed Estimate = ₹677.14 per cum

Total cost for line item-Earthworks = **11000000 cum x ₹677.14 = ₹744.85 Crores**

- **Total cost for External Utilities is as follows:**

  GHIAL provided the EPC contract details of Bhogapuram Airport which is going to completed in FY2026. So, per sqm rate of contract is taken as basis and rate is escalated as per WPI based inflation rate **(Refer Annexure-10).**

  Basic Rate per sqm = ₹55,840 per sqm

  Add WPI based inflation 3.00% for FY2027 to FY2030= ₹7,008.41 per sqm

  Rate considered for evaluation =₹62,848 per sqm

  Total cost for External Utilities= ₹408.51 Crores

  This cost is split equally between Terminal area and Airside area including the softs costs based on the similar approach adopted by GHIAL in their submissions.

  Total cost for external utilities for Airside Area = ₹408.51/2= ₹204.26 Crores

  Hard cost for external utilities for Airside Area = ₹204.26/1.14= ₹179.17 Crores

- **Total cost for Taxiway as Emergency Runway is as follows:**

  As per actual rate finalized for 3rd Control Period **(Refer Annexure-4)**

  Basic rate as per 3rd Control period (AERA Tariff order) = ₹10,517.12 per sqm

  Add WPI based inflation@3.58% upto FY2025= ₹766.50 per sqm

  Add WPI based inflation@0.9% for FY2026= ₹101.55 per sqm

  Add WPI based inflation@4.70% for FY2027 and 3.60% for FY 2028 and FY2029= ₹1408.81 per sqm

  Total Unit Rate per sqm= ₹10,517.12+₹766.50+₹101.55+₹1408.81= ₹12,793.99 per sqm

  Total cost for line item-Taxiway as Emergency Runway= **83600 sqm x ₹12,793.99 per sqm = ₹106.96 Crores**

- **Total cost for GSE Building is as follows:** Since no rates are available in 3rd Control Period, cost has been estimated based on CPWD PAR 2025. **(Refer Annexure- 5)**

  Total cost for GSE Building= 3741 sqm x ₹76,855.63 =₹28.75 Crores

Since the cost claimed by GHIAL on account of GSE Building is ₹28 Crores against the cost of ₹28.75 Crores determined by RITES, therefore the cost claimed by GHIAL on account of GSE Building of ₹28 Crores is considered reasonable.

- **Total cost for Airside Roads is as follows:**

  Since no rates are available in 3rd Control Period, cost has been estimated based on CPWD DSR 2023. In this, quantities are calculated using both master plan and google earth and CPWD DSR 2023 are inflated to construction year using WPI based inflation rate. **(Refer Annexure-6)**

  Rate from Detailed Estimate = ₹1,81,56,151.58 per km per lane

  Total cost for line item-Airside Roads = 45 lane -km x ₹1,81,56,151.58 per km per lane= ₹81.70 Crores

- **Total cost for GSE Parking is as follows:**

  As per actual rate finalized for 3rd Control Period Approach **(Refer Annexure-4)**

  Basic rate as per 3rd Control period (AERA Tariff order) = ₹10,517.12 per sqm

  Add WPI based inflation@3.58% upto FY2025= ₹766.50 per sqm

  Add WPI based inflation@0.9% for FY2026= ₹101.55 per sqm

  Add WPI based inflation@4.70% for FY2027 and 3.60% for FY 2028 and FY2029= ₹1408.81 per sqm

  Total Unit Rate per sqm= ₹10,517.12+₹766.50+₹101.55+₹1408.81= ₹12,793.99 per sqm

  Total cost for line item-GSE Parking= **25000 sqm x₹12,793.99 per sqm = ₹31.98 Crores**

- For Soft costs component, RITES has recommended the value of Preliminaries & Other Costs, Permits, Insurance, etc., Design and PMC and Contingencies as per the values considered for finalization of CAPEX for 3rd Control period.
  i. Preliminaries & Other cost: 2% of Hard cost
  ii. Permits, Insurance etc.: 1% of Hard cost
  iii. Design & PMC: 4.03% of Hard cost
  iv. Contingencies: 3% of Hard cost

Table 29 Detailed line item-wise Capex Costs towards Northern Runway & associated airside works as worked out by RITES

NORTHERN PRECINT - AIRSIDE		
CAPEX AS PER RITES WORKING		
Activity	**Cost in Crores (GHIAL)**	**Cost in Crores (RITES)**
A- NORTHERN PRECINT - AIRSIDE WORKS		
Runway, Taxiway and Apron	1,712.00	1,693.47
Elevated Taxiway	710.00	709.92
Airside Anciliary Building	97.00	92.23
Perimeter Wall	37.00	37.00
Earth Works	910.00	744.85
External Utilities	194.00	179.17
Taxiway as emergency runway	108.00	106.96
GSE Building	28.00	28.00
Airside Roads	83.00	81.70
GSE Parking	32.00	31.98
Sub-total: Hard Costs	**3,913.00**	**3,705.29**
Preliminaries & Other cost	78.00	74.15
Permits, Insurance etc	78.00	37.07
Design & PMC	196.00	159.41
Contingencies	196.00	111.22
Sub-total: Soft Costs	**548.00**	**371.81**
Total Cost	**4,461.00**	**4,077.10**

Based on the above observations and capex evaluation approach, the cost towards Northern Runway & associated works has been worked as **Rs 4,077.10 Crores.**

6.4.2. Capex Costs towards Northern Precinct Development- Landside Works

AS PROPOSED BY GHIAL

The GHIAL has estimated the CAPEX based on cost per unit area of approved rate instead of detailed calculation-

- For the Terminal Building, GHIAL has considered the expansion work of terminal building during 3rd CAPEX plan. The prevailing rates, valid up to Mar-24, have been used as the base and same has been adjusted for inflation and market dynamics at 5.80% per annum from April,2024 to September,2029 which is anticipated completion timeline.

  Total Rate proposed per unit area = ₹2,12,915/-

  Total cost of Terminal Building for 2,25,000sqm= ₹2,12,915 x 2,25,000 = ₹4,791 Cr.

- For CNS ATM Building, GHIAL has considered the CNS ATM building works executed in March, 2022 and worked out per sqm rate as hard cost with addition of 5.80% per annum escalation factor for inflation and market dynamics from April,2022 to September,2029.

  Total Rate proposed per unit area = ₹80,966/-

  Total cost of CNS ATM Building for 4,400sqm= ₹80,966x 4,400= ₹36Cr.

- For Landside Ancillary Building, GHIAL has considered the CNS ATM building works executed in March 2022 and worked out per sqm rate as hard cost with addition of 5.80% per annum escalation factor for inflation and market dynamics from April,2022 to September,2029.

  Total Rate proposed per unit area = ₹80,966 per sqm

  Total cost of Landside Ancillary Building for 3,000sqm= ₹80,966 x 3,000= ₹24Cr.

- For Landside Road, GHIAL has considered the previous work with P.O. No: 5000021147 issued in October 2025, derived rate is ₹4,334 per sqm and here considered rate is ₹4,100 per sqm and rate adjusted for inflation and market dynamics at 5.80% per annum.

  Total Rate proposed per unit area = ₹5,284/-

  Total cost of Landside Road for 28,455m= ₹5,284x 28,455= ₹15Cr.

- For Dual Elevated Ramp, GHIAL has considered the previous work of similar complexity was executed in Delhi in 2023, cost of the cross taxiway has been used as the base and then adjusted for inflation and market dynamics at 5.80% per annum.

  Total Rate proposed per unit area = ₹46,435 per sqm

  Total cost of Dual Elevated Ramp for 25,000sqm= ₹46,435x25,000= ₹116Cr.

- For Landscaping, GHIAL has given the cost based on their internal estimate.

  Total cost of External Utilities = ₹67Cr.

- For Additional Items- Car Parking Area, GHIAL has given the cost based on their internal estimate.

  Total Rate proposed per unit area = ₹9,545 per sqm

  Total cost of Additional Items- Car Parking Area for 1,00,000sqm= ₹9,545 x 1,00,000= ₹95Cr.

- For Additional Items- IT systems & Telecommunication, GHIAL has considered IT concession price schedule for GVIAL- 141 Cr investment for terminal of 61000 sqm considered as base and calculated as pro-rata basis.

  Total cost of Additional Items- IT systems & Telecommunication = ₹635Cr.

- For Additional Items- Operational Equipment's, GHIAL has considered the cost of minimum requirements like fire engines, runway rubber removal equipment, trolley etc. while giving this estimate.
  Total cost of Additional Items- IT systems & Telecommunication = ₹63Cr
- For Additional Items- External Utilities, GHIAL has considered 4% of CAPEX based on experience at another airport as a hard cost and for purposes of allocation cost split equally between airside and terminal. Refer GMR Goa International Airport (GGIAL) order- 117 Cr for utilities against a hard cost of 2695 Cr, 4.34%. Current capex- 9951 cr. 4% - 398 cr.

  Total cost of External Utilities = ₹194Cr.

- Sub-total of Hard cost towards Northern Passenger Terminal Building is ₹6,038.
- For Soft costs component, GHIAL considered as follows:
  i. Preliminaries & Other cost: 2% of Hard cost
  ii. Permits, Insurance etc.: 2% of Hard cost
  iii. Design & PMC: 5% of Hard cost
  iv. Contingencies: 5% of Hard cost
- The total Capex costs towards Northern Passenger Terminal Building is ₹6,781Cr.

Table 30 Details of item-wise of Capex Costs towards Northern Passenger Terminal Building

Sr. No	Activity	Unit	Qty	Rate	Cost (Cr.)
1	Terminal Building	Sqm	2,25,000	2,12,915	4,791
2	CNS ATM Building	Sqm	4,400	80,966	36
3	Landside Ancillary Buildings	Sqm	3,000	80,966	24
4	Landside Roads	Sqm	28,455	5,284	15
5	Dual Elevated Ramp	Sqm	25,000	46,435	116
6	Landscaping				67
Additional Items					
7	Car parking area	Sqm	1,00,000	9,545	95
8	IT Systems & Telecommunication				635
5	Operational equipment				63
9	External Utilities				194
	Sub-total: Hard Costs				**6,038**

Sr. No	Activity	Unit	Qty	Rate	Cost (Cr.)
10	Preliminaries & Other cost	2%			106
11	Permits, Insurance etc.	2%			106
12	Design & PMC	5%			265
13	Contingencies	5%			265
	Sub-total: Soft Costs				**743**
	Total Cost				**6,781**

The phasing of the cost of the project is as follows:

Table 31 Phasing of Capex Costs towards Northern Passenger Terminal Building

Capex Phasing	Cost in INR Crores			
	FY 27	FY 28	FY 29	FY 30
Opening	-	481	2,856	5,428
Addition	481	2,375	2,572	1,353
Commission of Assets				6,781
Closing	**481**	**2,856**	**5,428**	**-**

AS REVIEWED BY RITES

The cost of Northern Passenger Terminal Building has been reviewed/scrutinized in the same way as GHIAL has calculated and is summarized below.

RITES has calculated the inflation based on the Wholesale Price index (WPI) released by Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry in India on monthly. In this calculation, RITES has considered different rates based on WPI based inflation are as follows 3.58% up to FY25, 0.90% for FY2026, 4.70% for FY 2027 and 3.60% for FY2028 to 2029.

RITES has evaluated the 4th Control period proposal based on rate finalised for 3rd Control Period and Detailed rate approach. In Rate based on 3rd Control period finalised rate, utilizes rates as per AERA Tariff order for 3rd Control Period and duly adjusted for inflation using the Wholesale Price Index (WPI). In Detailed Approach, involves a detailed estimate for each line item to derive a per-square-meter (sqm) rate / per-meter (m) rate / per-cubic-meter (m^3) rate, which is then applied to the quantities proposed against line item in the Multi-Year Tariff Proposal (MYTP).

- **Total cost for Terminal Building is as follows:**

Basic rate for Terminal Building in 2nd CP Determined by RITES till Fy 2021 = ₹1,29,813.96 per sqm. **The detailed unit rate finalized based on 3rd Control**

Period of Terminal Building has been worked out and the same is placed at Annexure- 16.

Add WPI based inflation@7.14 % up to FY2022*= ₹9,268.72 per sqm

Add WPI based inflation@9.40 % up to FY2023= ₹ 13,073.77 per sqm

Add WPI based inflation @ -0.72 % up to FY2024= -₹1095.53 per sqm

Add WPI based inflation@2.31 % up to FY2025= ₹3,489.51 per sqm

Add WPI based inflation@0.90 % up to FY2026= ₹1,390.95 per sqm

Add WPI based inflation@4.70 % up to FY2027= ₹7,329.25 per sqm

Add WPI based inflation@3.60 % up to FY2028= ₹5877.74 per sqm

Add WPI based inflation@3.60 % up to FY2029= ₹6089.34 per sqm

Add WPI based inflation@3.60 % up to FY2030**= ₹6308.56 per sqm

Total cost per sqm= ₹1,81,546.27 per sqm

Total cost for line item-Terminal Building= **2,25,000 sqm x ₹1,81,546.27 per sqm = ₹4084.79 Crores**

* The authority has observed that the financial year 2021-2022 was exceptional year due to COVID-19 pandemic, wherein the inflation rate was 12.97%. Considering the extraordinary situation, the authority has felt that the inflation rate for financial year 2021-2022 needs to be rationalized. Hence, instead of considering the inflation rate of 12.97% for financial year 2021-2022 (as per press release dated April 18, 2022, by Dept. for Promotion of Industry and Internal Trade, Government of India), the authority has considered the average rate of inflation of FY 2020-21 (1.29%) and of FY 2021-22 (12.97%) which works out to 7.14%. The authority has considered this average rate of inflation for FY 2021-22 in order to smoothen out the volatility in commodity prices caused by COVID-19 pandemic and supply side disruptions.

** The design traffic shall (as per GHIAL revised submissions) exceed the enhanced capacity of the existing terminal building in the southern precinct in FY 2029, thereby justifying the commissioning of terminal building in the northern precinct. However, as informed by Authority, the likely completion date for terminal building in the northern precinct shall be 30th September 2030, capitalization year of the terminal building in the northern precinct is considered as FY 2030.

- **Total cost for CNS ATM Building is as follows:**

Since no rates are available in 3rd Control Period, cost has been estimated based on CPWD PAR 2025 **(Refer Annexure-5)**

Total Rate proposed per unit area = ₹76,855.63/-

Total cost for CNS ATM Building = **4400 sqm x ₹76,855.63 =₹33.82 Crores**

- **Total cost for Landside Anciliary Building is as follows:**

Since no rates are available in 3rd Control Period, cost has been estimated based on CPWD PAR 2025 **(Refer Annexure-5)**

Total Rate proposed per unit area = ₹76,855.63/-

Total cost for Landside Anciliary Building = **3000 sqm x ₹76,855.63 = ₹23.06 Crores**

- **Total cost for Landside Roads is as follows:**

Since no rates are available in 3rd Control Period, cost has been estimated based on CPWD DSR 2023. In this, quantities are calculated using both master plan and google earth and CPWD DSR 2023 are inflated to construction year using WPI based inflation rate. **(Refer Annexure-6)**

Rate from Detailed Estimate per unit area= ₹5,187.47/-

Total cost for line item-Landside Roads= **28455 sqm x ₹5,187.47 = ₹14.76Crores**

- **Total cost for Dual Elevated Ramp is as follows:**

Since no rates are available in 3rd Control Period, cost has been estimated based on MoRTH Project Cost Sheet. **(Refer Annexure-7)**

Rate from MoRTH Project Cost Sheet per unit area= ₹46,400/-

Total cost for line item-Dual Elevated Ramp = **25000 sqm x ₹46,400= ₹116Crores**

- **Total cost for Landscaping is as follows:**

Based on the backup of the Landscaping works submitted by GHIAL, the same is reworked based on WPI based inflation indices to derive the cost of landscaping works **(Refer Annexure-11)**

Total cost for line item-Landscaping **= ₹69.11 Crores**

Since, the cost claimed by GHIAL on account of Landscaping is ₹67 Crores against the cost of ₹69.11 Crores determined by RITES, therefore the cost

claimed by GHIAL on account of Landscaping of₹67 Crores is considered reasonable.

- **Total cost for Additional Items- Car Parking is as follows:**

  Since no rates are available in 3rd Control Period, cost has been estimated based on CPWD DSR 2023. **(Refer Annexure-12).**

  Rate from Detailed Estimate per unit area= ₹9410.87/- per sqm

  Total cost for line item- Additional Items- Car Parking= **100000 sqm x ₹9410.87 per sqm = ₹94.11 Crores**

- **Total cost for Additional Items- IT Systems & Telecommunication is as follows:**

  Based on the backup of the IT Systems & Telecommunication works submitted by GHIAL, the same is reworked based on WPI based inflation indices to derive the cost of landscaping works **(Refer Annexure-13)**

  Total cost for line item-Additional Items- IT Systems & Telecommunication= ₹635.34 Crores

  Since, the cost claimed by GHIAL on account of IT Systems & Telecommunication is ₹635 Crores against the cost of ₹635.34 Crores determined by RITES, therefore the cost claimed by GHIAL on account of IT Systems & Telecommunication of₹635 Crores is considered reasonable.

- **Total cost for Additional Items- Operational equipment is as follows:**

  Based on the back-up of Operational Equipment works, the same is considered reasonable and the cost is adopted in CAPEX **(Refer Annexure-14)**

  Total cost for line item- Additional Items- Operational equipment = ₹88.60 Crores

  Since the cost claimed by GHIAL on account of Operational Equipment is ₹63.00 Crores against the cost of ₹88.60 Crores determined by RITES, therefore the cost claimed by GHIAL on account of Operational Equipment of ₹63.00 Crores is considered reasonable.

- **Total cost for External Utilities is as follows:**

  GHIAL provided the EPC contract details of Bhogapuram Airport which is going to be completed in FY2026. So, per sqm rate of contract is taken as basis and rate is escalated as per WPI based inflation rate. **(Refer Annexure-10)**

  Basic Rate per sqm = ₹55,840 per sqm

  Add WPI based inflation@3.00% for FY2027 to FY2030= ₹7,008.41 per sqm

Rate considered for evaluation =₹62,848 per sqm

Total cost for External Utilities= ₹408.51 Crores

This cost is split equally between Terminal area and Airside area including the softs costs.

Total cost for external utilities for Landside Area = ₹408.51/2= ₹204.26 Crores

Hard cost for external utilities for Landside Area = **₹204.26/1.14= ₹179.17 Crores**

- For Soft costs component, RITES have recommended as per 3rd Capex, as follows:
    i. Preliminaries & Other cost: 2% of Hard cost
    ii. Permits, Insurance etc.: 1% of Hard cost
    iii. Design & PMC: 4.03% of Hard cost
    iv. Contingencies: 3% of Hard cost
- Further, RITES has also excluded soft costs on IT and Telecommunication works and Operational Equipment's keeping a similar approach in line with GHIAL submissions.

Table 32 Detailed line item-wise Capex Costs towards Northern Passenger Terminal Building as per RITES working

NORTHERN PRECINT - LANDSIDE		
CAPEX AS PER RITES WORKING		
Activity	**Cost in Crores (GHIAL)**	**Cost in Crores (RITES)**
Terminal Building	4,791.00	4,084.79
CNS ATM Building	36.00	33.82
Landside Ancillary Buildings	24.00	23.06
Landside Roads	15.00	14.76
Dual Elevated Ramp	116.00	116.00
Landscaping	67.00	67.00
Additional Items		
Car parking area	95.00	94.11
IT Systems & Telecommunication	635.00	635.00
Operational equipment	63.00	63.00
External Utilities	194.00	179.17
Sub-total: Hard Costs	**6,038.00**	**5,310.70**

NORTHERN PRECINT - LANDSIDE		
CAPEX AS PER RITES WORKING		
Activity	**Cost in Crores (GHIAL)**	**Cost in Crores (RITES)**
Preliminaries & Other cost	106.00	92.30
Permits, Insurance etc	106.00	46.15
Design & PMC	265.00	185.98
Contingencies	265.00	138.44
Sub-total: Soft Costs	**743.00**	**462.87**
Total Cost	**6,781.00**	**5,773.57**

Based on the above working, the CAPEX worked out by RITES for Development of Northern Precinct – Landside Works comes out to **Rs 5,773.57 Crores.**

6.4.3. Capex Costs towards Airport Connectivity and Transport for RGI Airport

AS PROPOSED BY GHIAL

The GHIAL has estimated the CAPEX based on the quantum of work and the rates arrived based on the historical cost information and current market prices for the works of the similar nature. The detailed break-up of the CAPEX is as per the following table from MYTP:

Table 33 Capex Costs towards Airport Connectivity and Transport for RGI Airport

Activity	Units	Length (Meter)	Lanes(L)	Cost (₹ Cr)
Flyover on east-west road (Main Access Road)	Meters	700	4L + 4L	77
Under Pass on east-west road (Main Access Road)	Meters	800	2L + 2L	58
Under pass on Main Access Road near Eastern ECT	Meters	1,000	4L + 4L	211
Under pass on Main Access Road near Western ECT	Meters	900	4L + 4L	223
Under pass along East-West Road (4L+4L)	Meters	2,400	4L + 4L	181
Under Pass Ext. along East-West Road	Meters	750	3L + 3L	81

Activity	Units	Length (Meter)	Lanes(L)	Cost (₹ Cr)
North-South Road	Meters	3,500	3L + 3L	44
18m Road (2+2)	Meters	3,100	2L + 2L	15
Sub-total: Hard Costs				**890**
Preliminaries & Other cost	2%			18
Permits, Insurance etc	2%			18
Design & PMC	5%			45
Contingencies	5%			45
Sub-total: Soft Costs				**125**
Total Cost				**1,015**

Table 34 Phasing of Capex Costs towards Airport Connectivity and Transport for RGI Airport

CAPEX Phasing (INR in Crs)	FY29	FY30
Opening works in progress	-	675
Works during the year	675	339
Commission of Assets	-	1015
Closing works in progress	675	-

AS REVIEWED BY RITES

The cost of Airport Connectivity and Transport systems for RGI Airport has been reviewed/scrutinized and is summarized below:

RITES has calculated the inflation based on the Wholesale Price index (WPI) released by Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry in India on monthly. In this calculation, RITES has considered different rates based on WPI based inflation are as follows 3.58% upto FY25, 0.90% for FY2026, 4.70% for FY2026 and 3.60% for FY 2028 to 2029.

- **Total cost for Flyover on east-west road (Main Access Road) is as follows:**

Since no rates are available in 3rd Control Period, cost has been estimated based on MoRTH Project Cost Sheet. **(Refer Annexure-7)**
Rate from MoRTH Project Cost Sheet per unit area= ₹46,400/-
Total cost for line item-Flyover on east-west road (Main Access Road) = **19600 sqm x ₹46,400/- = ₹90.94Crores**

Since the cost claimed by GHIAL on account of Flyover on east-west road (Main Access Road) is ₹77 Crores against the cost of ₹90.94 Crores determined by RITES, therefore the cost claimed by GHIAL on account of Flyover on east-west road (Main Access Road) of ₹77.00 Crores is considered reasonable.

- **Total cost for Underpass on east-west Road (Main Access Road) is as follows:**

Since no rates are available in 3rd Control Period, cost has been estimated based on MoRTH Project Cost Sheet. **(Refer Annexure-15)**
Rate from MoRTH Project Cost Sheet per unit area= ₹78,898.73/-
Total cost for line item-Underpass on east-west road (Main Access Road) **= 11200 sqm x ₹78,898.73 = ₹88.37 Crores**

Since the cost claimed by GHIAL on account of Underpass on east-west Road (Main Access Road) is ₹58 Crores against the cost of ₹88.37 Crores determined by RITES, therefore the cost claimed by GHIAL on account of Underpass on east-west Road (Main Access Road) of ₹58 Crores is considered reasonable.

- **Total cost for Underpass on Main Access Road near Eastern ECT is as follows:**

Since no rates are available in 3rd Control Period, cost has been estimated based on MoRTH Project Cost Sheet. **(Refer Annexure-15)**
Rate from MoRTH Project Cost Sheet per unit area= ₹78,898.73/-
Total cost for line item-Underpass on Main Access Road near Eastern ECT= **28000 sqm x ₹78,898.73=₹220.92 Crores**

Since the cost claimed by GHIAL on account of Underpass on Main Access Road near Eastern ECT is ₹211 Crores against the cost of ₹220.92 Crores determined by RITES, therefore the cost claimed by GHIAL on account of Underpass on Main Access Road near Eastern ECT of ₹211 Crores is considered reasonable.

- **Total cost for Underpass on Main Access Road near Western ECT is as follows:**

Since no rates are available in 3rd Control Period, cost has been estimated based on MoRTH Project Cost Sheet. **(Refer Annexure-15)**
Rate from MoRTH Project Cost Sheet per unit area= ₹78,898.73/-
Total cost for line item-Underpass on Main Access Road near Western ECT= **25200 sqm x ₹78,898.73 = ₹198.82 Crores**

- **Total cost for Underpass along east-west Road(4L+4L) is as follows:**

Since no rates are available in 3rd Control Period, cost has been estimated based on MoRTH Project Cost Sheet. **(Refer Annexure-15)**
Rate from MoRTH Project Cost Sheet per unit area= ₹78,898.73/-
Total cost for line item-Underpass along east-west Road(4L+4L) = **67200 sqm x ₹78,898.73 = ₹530.20 Cr**

Since the cost claimed by GHIAL on account of Underpass along east-west Road(4L+4L) is ₹181 Crores against the cost of ₹530.92 Crores determined by RITES, therefore the cost claimed by GHIAL on account of Underpass along east-west Road(4L+4L) of ₹181 Crores is considered reasonable.

- **Total cost for Underpass Ext. along East-West Road is as follows:**

Since no rates are available in 3rd Control Period, cost has been estimated based on MoRTH Project Cost Sheet. **(Refer Annexure-15)**
Rate from MoRTH Project Cost Sheet per unit area= ₹78,898.73/-
Total cost for line item-Underpass Ext. along East-West Road= **15750 sqm x ₹78,898.73 = ₹124.27 Cr**

Since the cost claimed by GHIAL on account of Underpass Ext. along East-West Road is ₹81 Crores against the cost of ₹124.27 Crores determined by RITES, therefore the cost claimed by GHIAL on account of Underpass Ext. along East-West Road of ₹81 Crores is considered reasonable.

- **Total cost for North-South Road is as follows:**

Since no rates are available in 3rd Control Period, cost has been estimated based on CPWD DSR rates. **(Refer Annexure-6)**
Rate from MoRTH Project Cost Sheet per unit km per lane= ₹1,81,56,151.58/- per lane per km
Total cost for line item-North South Road= **21 lane- km x ₹1,81,56,151.58 per lane per km =₹38.13Cr**

- **Total cost for 18m Road (2+2) is as follows:**

Since no rates are available in 3rd Control Period, cost has been estimated based on CPWD DSR rates. **(Refer Annexure-6)**
Rate from MoRTH Project Cost Sheet per km per lane= ₹1,81,56,151.58/- per lane per km
Total cost for line item-18m Road (2+2) =**12.40 lane- km x ₹1,81,56,151.58 per lane per km = ₹22.51 Cr**

Since the cost claimed by GHIAL on account of 18m Road (2+2) is ₹15 Crores against the cost of ₹22.51 Crores determined by RITES, therefore the cost claimed by GHIAL on account of 18m Road (2+2) of ₹15 Crores is considered reasonable.

- For Soft costs component, RITES has recommended the value of Preliminaries & Other Costs, Permits, Insurance, etc., Design and PMC and Contingencies as per the values considered for finalization of CAPEX for 3rd Control, as follows:
    i. Preliminaries & Other cost: 2% of Hard cost
    ii. Permits, Insurance etc.: 1% of Hard cost
    iii. Design & PMC: 4.03% of Hard cost
    iv. Contingencies: 3% of Hard cost

Table 35 Detailed line item-wise Capex Costs towards Airport Connectivity and Transport for RGI Airport as per RITES working

AIRPORT CONNECTIVITY		
CAPEX AS PER RITES WORKING		
Activity	**Cost in Crores (GHIAL)**	**Cost in Crores (RITES)**
Flyover on east-west road (Main Access Road)	77.00	77.00
Under Pass on east-west road (Main Access Road)	58.00	58.00
Under pass on Main Access Road near Eastern ECT	211.00	211.00
Under pass on Main Access Road near Western ECT	223.00	198.82
Under pass along East-West Road (4L+4L)	181.00	181.00
Under Pass Ext. along East-West Road	81.00	81.00
North-South Road	44.00	38.13
18m Road (2+2)	15.00	15.00
Sub Total: Hard Cost	**890.00**	**859.95**
Preliminaries & Other cost	18.00	17.20
Permits, Insurance etc	18.00	8.60
Design & PMC	45.00	34.66
Contingencies	45.00	25.80
Sub-total: Soft Costs	**125.00**	**86.25**
Total Costs	**1,015.00**	**946.21**

Based on the above observations and capex evaluation approach, the cost towards Airport Connectivity and Transport has been worked out as ₹946.21 Crores.

6.4.4. General Capex for the 4th Control Period

AS PROPOSED BY GHIAL

GHIAL proposed general/ operations for 4th Control period in the following section:

Table 36 General Capex proposed for the 4th Control Period

Particulars (₹ Crores)	FY27	FY28	FY29	FY30	FY31	Total
General Maintenance Capital Expenditure	553	268	142	175	164	1302

For the 4th Control Period, GHIAL has proposed a total general capital expenditure (Capex) of INR 1,302.3 Crores. This comprehensive budget is distributed across several key departments to support airport operations, infrastructure, and technological advancements. The largest allocations are designated for Security and Vigilance at 391.8 Crores, closely followed by Project, Engineering & Maintenance at 389.5 Crores. IT infrastructure requires a significant investment of 197.0 Crores, while Strategic Initiatives are allocated 131.5 Crores. The remaining departmental funds are directed toward Terminal Operations with 94.8 Crores, Landscape development with 53.4 Crores, and Airport Rescue and Fire Fighting (ARFF) with 44.2 Crores. Within the proposed General Capex of INR 1,302 Crores, 'Other Sustenance Capex' (works valued less than INR 5 Crores) accounts for a consolidated sum of INR 346.6 Crores. However, the detailed break-up of this 346.6 Crores which is 26.62% of total General Capex had been received on 11.06.2026 via email by AERA **(Refer Annexure-33)**. In light of this detailed cost breakdown, RITES recommends to include this in the 4th Control Period Capex Plan. Therefore, the General Maintenance CAPEX considered for CP-4 is **Rs 1302 Crores.**

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7. FINDINGS

7.1. FINDINGS

With respect to the detailed CAPEX Evaluation of the MYTP Proposal for CP-4, the following is submitted:

- The evaluation of the submission of the MYTP Proposal for CP-4 for RGIA Airport was carried out based on MYTP and other data submitted by GHIAL from time to time. This assessment has been undertaken in absence of any detailed masterplan, survey data, designs and detailed estimates which are still being formalized by GHIAL.
- A detailed evaluation of the MYTP was undertaken and it has been found that the expansion proposal submitted by GHIAL with respect to Southern Precinct Enhancements, Northern Precinct Development and Airport Connectivity and Transport Infra Development is essential in line with the growing traffic at Rajiv Gandhi International Airport.
- The Passenger Traffic at end of CP-4 (based on CAPA's approach) in FY 2031 shall be 51.19 million as evaluated in Chapter 5 and the same justifies the development of a New Terminal Building in the Northern Precinct as per the unit area proposed by IMG Norms even after capacity augmentation of existing terminal to 37 MPPA as proposed by GHIAL.
- The Air Traffic Movements shall exceed 3,28,000 movements per annum in FY 2031 and shall exceed 2,50,000 movements per annum in FY 2029 which triggers the need for development of Airside in the Northern Runway including a New Runway System, Associated Taxiways and Apron Systems.
- The evaluation also underscores the requirement of development of a comprehensive Air Connectivity and Transportation System for Northern Precinct works and for general connectivity to both Northern and Southern Precinct based on a robust and sustained traffic growth anticipated in CP-4.
- For the purpose of justification of cost for the 4th control period, RITES has considered all the rates including GST (@18%).
- The CAPEX evaluation by RITES considers a lower of the two approach whereby lowest of the CAPEX on each head as submitted by GHIAL and as Evaluated by RITES has been considered to arrive at the final CAPEX for CP-4. The CAPEX Evaluated by RITES comes to Rs 12,497.90 Crores against Rs 13,986 Crores submitted by GHIAL in the MYTP for CP-4.

Table 37 Recommended CAPEX for the 4th Control Period

S.N0	SUBHEAD	EVALUATED CAPEX I/C GST (IN RS. CRORES)
1	Southern Precinct Enhancement Works	399.02
2	Northern Precinct Airside Works	4,077.10
3	Northern Precinct Land Side Works	5,773.57
4	Airport Connectivity and Transport at RGI Airport	946.21
5	General Maintenance CAPEX	1302.00
TOTAL CAPEX FOR CP-4 (INCLUDING GST)		**12,497.90**

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ANNEXURE-1
Wholesale Price Index

आर्थिक सलाहकार का कार्यालय

OFFICE OF THE ECONOMIC ADVISER

DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE

Wholesale Price Index (WPI)

Yearly Wholesale Price Index
Name of Commodity : ALL COMMODITIES
Type : Group Item
Weight : 100
Base Year : 2011-12 = 100

Calendar Year	Index	Financial Year	Index
2024	154	**2024-25**	154.9
2023	151.3	**2023-24**	151.4
2022	151.3	**2022-23**	152.5
2021	135	**2021-22**	139.4
2020	121.8	**2020-21**	123.4
2019	121.2	**2019-20**	121.8
2018	118.9	**2018-19**	119.8
2017	114.1	**2017-18**	114.9
2016	110.3	**2016-17**	111.6
2015	110.3	**2015-16**	109.7
2014	114.8	**2014-15**	113.9
2013	111.1	**2013-14**	112.5
2012		**2012-13**	106.9

1. Figure 0 may be treated as index for particular item not-available.

ANNEXURE-2
RBI Survey of Professional Forecasters 98th Round

Survey of Professional Forecasters on Macroeconomic Indicators– Results of the 99th Round[1]

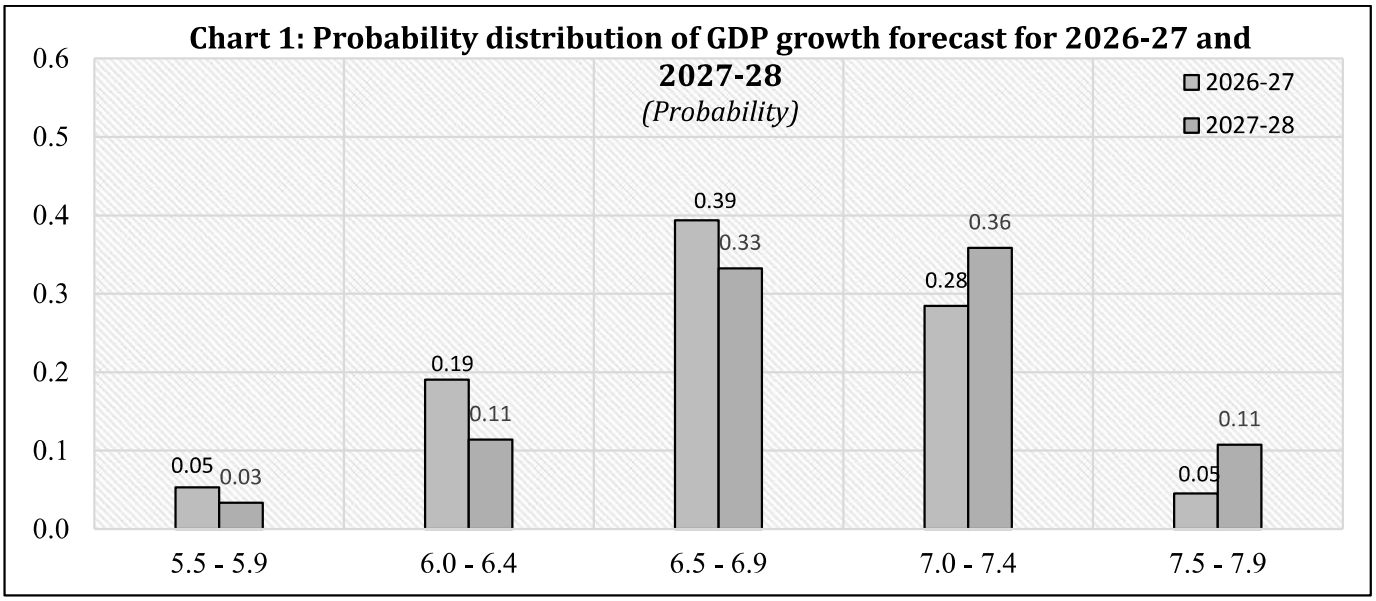
The Reserve Bank has been conducting the survey of professional forecasters (SPF) since September 2007. Forty-six panellists participated in the 99th round of the bi-monthly survey conducted during March 2026. The survey results are summarised in terms of their median forecasts and summary statistics are presented in Annexes 1-8.

Highlights:

1. Output

- Real gross domestic product (GDP) is expected to grow by 6.9 per cent in 2026-27 and by 7.0 per cent in 2027-28 (Table 1).
- SPF panellists placed GDP growth forecasts in the range of 6.0-7.5 per cent for 2026-27 and in the range of 6.2-8.0 per cent for 2027-28 (Annexes 2 and 3).
- Forecasters have assigned highest probability to real GDP growth in the range of 6.5-6.9 per cent for 2026-27 and in the range of 7.0-7.4 per cent for 2027-28 (Chart 1).

Chart 1: Probability distribution of GDP growth forecast for 2026-27 and 2027-28



Note: Tail parts of the distributions are not presented in this chart but are included in Annex 7.

[1] The survey results reflect the respondents' views, which are not necessarily shared by the Reserve Bank. Results of the previous survey round were released on the Bank's website on February 06, 2026.

- Annual growth in real private final consumption expenditure (PFCE) and real gross fixed capital formation (GFCF) for 2026-27 are expected at 7.0 per cent and 7.1 per cent respectively; and for 2027-28, both are expected at 7.0 per cent.

Table 1: Median Forecast of Growth in GDP, GVA and components

(in per cent)

	2025-26	2026-27	2027-28
Real GDP	7.6 (+0.1)	6.9 (+0.1)	7.0
a. Real PFCE	7.7 (+0.3)	7.0 (-0.1)	7.0
b. Real GFCF	7.1 (-0.3)	7.1 (-0.1)	7.0
Nominal PFCE	9.1 (-0.2)	10.0 (-0.4)	10.5
Real GVA	7.7 (+0.4)	6.8 (+0.1)	6.9
a. Agriculture and Allied Activities	2.4 (-1.1)	3.0 (-0.5)	3.3
b. Industry	8.9 (+2.3)	7.0 (+0.8)	7.6
c. Services	8.8 (+0.1)	8.0 (+0.2)	7.8
Gross Saving Rate *[per cent of gross national disposable income]*	33.4 (+3.4)	32.9 (+2.9)	32.8
Gross Capital Formation Rate *[per cent of GDP at current market prices]*	34.6 (+1.6)	34.5 (+1.5)	34.7

Note: The figures in parentheses indicate the extent of revision in median forecasts (in percentage points) relative to the previous SPF round (applicable for Tables 1-4).

- In terms of quarterly path, real GDP growth (y-o-y) is expected at 7.3 per cent during Q4:2025-26; and between 6.8-7.0 per cent in the subsequent four quarters (Table 2).

Table 2: Median Growth Forecast of Quarterly GDP, GVA and components					
					(in per cent)
	Q4:2025-26	**Q1:2026-27**	**Q2:2026-27**	**Q3:2026-27**	**Q4:2026-27**
Real GDP	7.3 (+0.6)	6.9 (+0.1)	6.8 (+0.1)	6.8 (-0.2)	7.0
a. Real PFCE	7.5 (+0.4)	6.5 (-0.5)	6.7 (-0.3)	7.0 (0.0)	7.1
b. Real GFCF	7.2 (+0.2)	7.0 (+0.1)	7.0 (0.0)	7.0 (0.0)	7.0
Real GVA	7.3 (+0.7)	6.7 (0.0)	6.8 (+0.1)	6.7 (0.0)	6.8

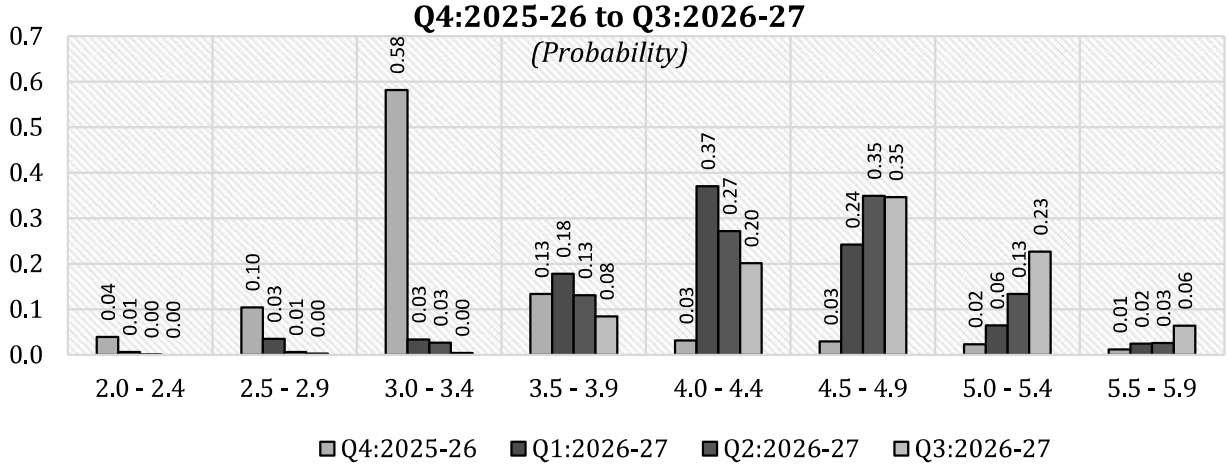
2. Inflation

- Annual headline inflation, based on CPI-Combined, is expected at 4.5 per cent during 2026-27 and at 4.2 per cent during 2027-28 (Annexes 2 and 3).
- Headline CPI inflation (y-o-y) is expected at 3.1 per cent during Q4:2025-26. Thereafter, it is expected to increase gradually from 4.1 percent in Q1:2026-27 to 4.7 per cent in Q3 and then moderate to 4.2 per cent during Q4:2026-27 (Table 3).
- CPI inflation, excluding food and beverages, pan, tobacco and intoxicants, and fuel and light, is expected at 3.5 per cent during Q4:2025-26; thereafter it is projected to remain between 4.0-4.3 per cent in the subsequent four quarters of 2026-27.

Table 3: Median Forecast of Quarterly Inflation					
					(in per cent)
	Q4:2025-26	**Q1:2026-27**	**Q2:2026-27**	**Q3:2026-27**	**Q4:2026-27**
CPI Combined (General)	3.1 (+0.3)	4.1 (+0.3)	4.4 (+0.5)	4.7 (+0.3)	4.2
CPI Combined excluding *food and beverages*, *pan, tobacco and intoxicants* and *fuel and light*	3.5 (-1.0)	4.0 (-0.4)	4.1 (-0.2)	4.3 (+0.1)	4.0
WPI All Commodities	2.3 (+0.8)	4.5 (+1.3)	5.3 (+2.0)	5.5 (+2.3)	3.7
WPI Non-food Manufactured Products	3.4 (+1.4)	3.8 (+1.7)	3.7 (+1.4)	4.0 (+1.7)	2.8

- Forecasters have assigned the highest probability to the headline CPI inflation lying in the range of 3.0-3.4 per cent in Q4:2025-26; and in the range of 4.0-4.4 per cent during Q1:2026-27 and 4.5-4.9 per cent during the subsequent two quarters of 2026-27 (Chart 2).

Chart 2: Probability distribution of CPI inflation forecast from Q4:2025-26 to Q3:2026-27



Note: Tail parts of the distributions are not presented in this chart but are included in Annex 8.

3. External Sector

- Merchandise exports and imports are projected to grow by 4.0 per cent and 8.3 per cent, respectively, during 2026-27 and by 5.0 per cent and 5.4 per cent, respectively, during 2027-28, in US dollar terms (Table 4).
- Current account deficit (CAD) is expected at 1.5 per cent (of GDP at current market prices) for 2026-27 and at 1.2 per cent for 2027-28.

Table 4: Median Forecast of Select External Sector Variables

	2025-26	2026-27	2027-28
Merchandise Exports in US $ terms *(annual growth in per cent)*	1.5 (+0.2)	4.0 (+0.7)	5.0
Merchandise Imports in US $ terms *(annual growth in per cent)*	7.9 (+1.9)	8.3 (+2.4)	5.4
Current Account Balance *(per cent of GDP at current market prices)*	-1.0 (0.0)	-1.5 (-0.5)	-1.2

The Reserve Bank thanks the following panellists for their participation in this round of the Survey of Professional Forecasters (SPF):

Aastha Gudwani (Barclays Bank PLC), Abhishek Gupta (Bloomberg Economics), Aditi Nayar (ICRA Ltd.), Aditya Vyas (STCI Primary Dealer Ltd.), Anuradha Patnaik (University of Mumbai), Anurag Chandra (BHP Group), CRISIL Limited, Deloitte, Debopam Chaudhuri (Piramal Finance Ltd.), Garima Kapoor and Subhankar Sanyal (Elara Securities), Gaura Sen Gupta (IDFC FIRST Bank), Gaurav Kapur (IndusInd Bank Ltd.), ICICI Securities Primary Dealership, Indranil Pan (Yes Bank Ltd.), Janaki Samant (Centre for Monitoring Indian Economy Pvt Ltd.), Kanika Pasricha (Union Bank of India), Madhavi Arora (Emkay Global Financial Services Ltd.), Minakshi Chakraborty (Mahindra Auto), Radhika Piplani (Motilal Oswal Financial Services Ltd.), Rajani Sinha (CareEdge Ratings), S P Sharma (ASSOCHAM), Sakshi Gupta (HDFC Bank), Samiran Chakraborty (Citigroup Global Markets India Private Limited), Shailesh Kejariwal (B&K Securities India Pvt. Ltd.), Shubhada Rao (QuantEco Research), Soumya Kanti Ghosh (State Bank of India), Suvodeep Rakshit (Kotak Securities), TAC Economics, Tanvee Gupta Jain (UBS Securities India Private Ltd.), Tirthankar Patnaik (National Stock Exchange), Upasna Bhardwaj (Kotak Mahindra Bank Ltd.), Vikram Chhabra (360 ONE Asset Management Ltd.) and Vikram Murarka (Kshitij Consultancy Services).

The Bank also acknowledges the contribution of thirteen other SPF panellists, who prefer to remain anonymous.

Annex 1: Annual Forecasts for 2025-26

	Key Macroeconomic Indicators	Annual Forecasts for 2025-26					
		Mean	Median	Max	Min	1st quartile	3rd quartile
1	GDP at constant prices: Annual Growth (per cent)	7.5	**7.6**	7.8	6.0	7.5	7.6
a	Private Final Consumption Expenditure (PFCE) at constant prices: Annual Growth (per cent)	7.8	**7.7**	8.8	5.8	7.7	8.3
b	Gross Fixed Capital Formation (GFCF) at constant prices: Annual Growth (per cent)	7.1	**7.1**	7.7	6.5	7.0	7.2
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	9.4	**9.1**	12.6	8.0	8.9	9.6
3	Gross Capital Formation Rate (per cent of GDP at current market prices)	34.3	**34.6**	35.0	33.2	34.2	34.6
4	GVA at constant prices: Annual Growth (per cent)	7.6	**7.7**	8.0	6.0	7.6	7.7
a	Agriculture & Allied Activities at constant prices: Annual Growth (per cent)	2.8	**2.4**	5.0	2.2	2.4	2.7
b	Industry at constant prices: Annual Growth (per cent)	8.8	**8.9**	10.0	5.8	8.8	9.3
c	Services at constant prices: Annual Growth (per cent)	8.7	**8.8**	10.0	6.0	8.6	9.0
5	Gross Saving Rate (per cent of Gross National Disposable Income) -at current prices	32.8	**33.4**	35.2	30.0	31.0	34.0
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)	4.5	**4.4**	5.2	4.3	4.4	4.5
7	Combined Gross Fiscal Deficit (per cent to GDP at current market prices)	7.7	**7.6**	9.5	7.1	7.4	7.7
8	Bank Credit of Scheduled commercial banks: Annual Growth (per cent)	13.2	**13.5**	15.0	11.0	12.5	14.0
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	6.8	**6.8**	7.1	6.3	6.7	6.9
10	Yield on 91-day T-Bill of Central Govt. (end-period)	5.5	**5.4**	6.4	5.2	5.3	5.5
11	Merchandise Exports (BoP basis in US$ terms): Annual Growth (per cent)	1.5	**1.5**	6.0	-3.2	0.9	2.0
12	Merchandise Imports (BoP basis in US$ terms): Annual Growth (per cent)	7.8	**7.9**	14.9	0.9	6.8	8.6
13	Current Account Balance in US$ bn.	-38.2	**-38.5**	-24.5	-53.7	-43.9	-32.5
a	Current Account Balance (per cent to GDP at current market prices)	-1.0	**-1.0**	-0.7	-1.6	-1.1	-0.9
14	Inflation based on CPI Combined: Headline	Actual (up to Feb-26): 1.9#					
15	Inflation based on CPI Combined: excluding Food and Beverages, Pan, Tobacco and Intoxicants and Fuel and Light	Actual (up to Feb-26): 4.2#					
16	Inflation based on WPI: All Commodities	0.9	**0.7**	4.1	0.0	0.6	0.8
17	Inflation based on WPI: Non-food Manufactured Products	1.8	**1.9**	3.2	0.8	1.7	2.0

#: Average CPI inflation in 2025-26 (up to February). CPI inflation for April - December, 2025 is based on the 2012 series. Inflation for January-February 2026 is based on the CPI new base series (2024=100).

Annex 2: Annual Forecasts for 2026-27

	Key Macroeconomic Indicators	Annual Forecasts for 2026-27					
		Mean	Median	Max	Min	1st quartile	3rd quartile
1	GDP at constant prices: Annual Growth (per cent)	6.8	**6.9**	7.5	6.0	6.5	7.0
a	Private Final Consumption Expenditure (PFCE) at constant prices: Annual Growth (per cent)	7.0	**7.0**	8.3	5.8	6.7	7.3
b	Gross Fixed Capital Formation (GFCF) at constant prices: Annual Growth (per cent)	7.1	**7.1**	9.2	5.8	6.5	7.4
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	10.3	**10.0**	13.3	8.1	8.9	11.7
3	Gross Capital Formation Rate (per cent of GDP at current market prices)	34.3	**34.5**	35.4	33.0	33.8	34.9
4	GVA at constant prices: Annual Growth (per cent)	6.7	**6.8**	7.5	6.0	6.5	7.0
a	Agriculture & Allied Activities at constant prices: Annual Growth (per cent)	3.1	**3.0**	4.5	1.9	2.6	3.5
b	Industry at constant prices: Annual Growth (per cent)	7.2	**7.0**	10.0	5.6	6.7	7.5
c	Services at constant prices: Annual Growth (per cent)	7.9	**8.0**	9.6	5.8	7.6	8.1
5	Gross Saving Rate (per cent of Gross National Disposable Income) -at current prices	32.5	**32.9**	35.4	30.0	31.0	33.5
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)	4.4	**4.4**	4.9	4.2	4.3	4.5
7	Combined Gross Fiscal Deficit (per cent to GDP at current market prices)	7.6	**7.5**	9.5	6.9	7.3	7.7
8	Bank Credit of Scheduled commercial banks: Annual Growth (per cent)	12.6	**13.0**	18.0	9.0	12.0	13.1
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	6.9	**7.0**	7.5	6.2	6.7	7.2
10	Yield on 91-day T-Bill of Central Govt. (end-period)	5.8	**5.8**	6.4	5.4	5.5	5.9
11	Merchandise Exports (BoP basis in US$ terms): Annual Growth (per cent)	4.8	**4.0**	16.7	0.1	3.0	5.7
12	Merchandise Imports (BoP basis in US$ terms): Annual Growth (per cent)	8.3	**8.3**	17.9	1.3	6.7	9.5
13	Current Account Balance in US$ bn.	-60.9	**-62.9**	-20.1	-107.3	-70.1	-47.0
a	Current Account Balance (per cent to GDP at current market prices)	-1.5	**-1.5**	-0.4	-2.6	-1.7	-1.1
14	Inflation based on CPI Combined: Headline	4.4	**4.5**	6.0	3.7	4.2	4.6
15	Inflation based on CPI Combined: excluding Food and Beverages, Pan, Tobacco and Intoxicants and Fuel and Light	4.3	**4.1**	6.8	3.2	3.9	4.6
16	Inflation based on WPI: All Commodities	4.7	**5.0**	8.5	1.5	3.5	5.5
17	Inflation based on WPI: Non-food Manufactured Products	3.6	**3.7**	8.7	1.0	2.7	4.1

Annex 3: Annual Forecasts for 2027-28

	Key Macroeconomic Indicators	Annual Forecasts for 2027-28					
		Mean	Median	Max	Min	1st quartile	3rd quartile
1	GDP at constant prices: Annual Growth (per cent)	7.0	**7.0**	8.0	6.2	6.8	7.0
a	Private Final Consumption Expenditure (PFCE) at constant prices: Annual Growth (per cent)	6.9	**7.0**	7.9	6.0	6.8	7.2
b	Gross Fixed Capital Formation (GFCF) at constant prices: Annual Growth (per cent)	7.2	**7.0**	9.0	6.5	6.8	7.4
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	10.1	**10.5**	12.2	8.0	9.6	11.0
3	Gross Capital Formation Rate (per cent of GDP at current market prices)	34.7	**34.7**	35.8	33.0	34.4	35.0
4	GVA at constant prices: Annual Growth (per cent)	6.9	**6.9**	7.9	6.2	6.7	7.2
a	Agriculture & Allied Activities at constant prices: Annual Growth (per cent)	3.4	**3.3**	5.0	2.2	2.9	3.8
b	Industry at constant prices: Annual Growth (per cent)	7.7	**7.6**	10.0	5.8	6.9	8.0
c	Services at constant prices: Annual Growth (per cent)	7.8	**7.8**	9.1	5.8	7.5	8.1
5	Gross Saving Rate (per cent of Gross National Disposable Income) -at current prices	32.4	**32.8**	35.2	30.0	31.3	33.4
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)	4.4	**4.4**	5.1	4.0	4.2	4.5
7	Combined Gross Fiscal Deficit (per cent to GDP at current market prices)	7.4	**7.2**	9.5	6.8	7.0	7.5
8	Bank Credit of Scheduled commercial banks: Annual Growth (per cent)	12.4	**12.0**	20.0	8.0	11.5	13.5
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	6.9	**6.9**	8.0	6.4	6.6	7.1
10	Yield on 91-day T-Bill of Central Govt. (end-period)	6.1	**6.2**	6.5	5.5	5.9	6.4
11	Merchandise Exports (BoP basis in US$ terms): Annual Growth (per cent)	5.1	**5.0**	13.4	0.1	3.4	5.4
12	Merchandise Imports (BoP basis in US$ terms): Annual Growth (per cent)	5.0	**5.4**	9.5	1.0	2.3	6.6
13	Current Account Balance in US$ bn.	-47.9	**-52.5**	-19.5	-75.0	-58.6	-28.4
a	Current Account Balance (per cent to GDP at current market prices)	-1.1	**-1.2**	-0.4	-1.9	-1.4	-0.8
14	Inflation based on CPI Combined: Headline	4.3	**4.2**	5.5	3.7	4.1	4.5
15	Inflation based on CPI Combined: excluding Food and Beverages, Pan, Tobacco and Intoxicants and Fuel and Light	4.0	**3.9**	6.3	3.2	3.5	4.0
16	Inflation based on WPI: All Commodities	3.6	**3.8**	6.2	1.5	2.9	4.0
17	Inflation based on WPI: Non-food Manufactured Products	3.1	**3.0**	7.0	1.1	2.0	3.8

Annex 4: Quarterly Forecasts from Q4:2025-26 to Q4:2026-27

	Key Macroeconomic Indicators	Quarterly Forecasts											
		Q4: 2025-26				Q1: 2026-27				Q2: 2026-27			
		Mean	Median	Max	Min	Mean	Median	Max	Min	Mean	Median	Max	Min
1	GDP at constant prices: Annual Growth (per cent)	7.2	**7.3**	8.1	5.7	6.8	**6.9**	8.2	5.7	6.7	**6.8**	7.7	5.8
a	Private Final Consumption Expenditure (PFCE) at constant prices: Annual Growth (per cent)	6.9	**7.5**	9.4	5.1	6.7	**6.5**	8.9	5.1	6.8	**6.7**	8.0	6.0
b	Gross Fixed Capital Formation (GFCF) at constant prices: Annual Growth (per cent)	7.2	**7.2**	8.0	6.0	7.0	**7.0**	9.5	5.4	6.8	**7.0**	10.0	4.1
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	9.0	**8.5**	14.0	7.2	9.5	**9.5**	11.5	7.5	9.5	**9.2**	12.1	7.7
3	Gross Fixed Capital Formation (GFCF) Rate (per cent of GDP at current market prices)	31.6	**30.6**	35.0	30.3	32.7	**32.2**	35.0	30.5	33.5	**34.2**	35.5	30.5
4	GVA at constant prices: Annual Growth (per cent)	7.2	**7.3**	8.0	6.5	6.8	**6.7**	7.9	5.7	6.7	**6.8**	7.4	5.7
a	Agriculture & Allied Activities at constant prices: Annual Growth (per cent)	2.2	**2.1**	3.5	1.1	2.6	**2.5**	4.0	1.5	2.9	**2.8**	4.0	1.5
b	Industry at constant prices: Annual Growth (per cent)	7.9	**7.8**	12.0	5.7	7.2	**6.7**	12.0	5.0	7.1	**6.5**	11.0	5.0
c	Services at constant prices: Annual Growth (per cent)	8.8	**8.9**	9.5	7.9	8.0	**7.9**	10.6	6.4	7.7	**7.7**	9.0	6.6
5	IIP: Quarterly Average Growth (per cent)	4.5	**4.5**	8.0	2.4	4.3	**4.4**	8.0	2.1	4.0	**4.0**	6.0	2.2
6	Merchandise Exports -BoP basis (in US$ bn.)	112.4	**112.4**	123.1	105.0	115.5	**112.9**	131.3	108.5	116.9	**115.3**	133.7	107.3
7	Merchandise Imports -BoP basis (in US$ bn.)	205.4	**204.0**	250.0	179.4	207.7	**206.8**	250.0	181.8	217.0	**216.4**	236.9	199.5
8	Rupee per US $ Exchange rate (end-period)	-	-	-	-	93.9	**94.0**	97.0	91.0	93.9	**93.5**	99.0	90.0
9	Crude Oil (Indian basket) price (US $ per barrel) (end-period)	-	-	-	-	102.7	**100.0**	135.0	67.0	91.4	**90.0**	139.2	68.0
10	Policy Repo Rate (end-period)	-	-	-	-	5.26	**5.25**	5.50	5.25	5.28	**5.25**	5.50	5.25

	Key Macroeconomic Indicators	Quarterly Forecasts							
		Q3: 2026-27				Q4: 2026-27			
		Mean	Median	Max	Min	Mean	Median	Max	Min
1	GDP at constant prices: Annual Growth (per cent)	6.8	**6.8**	7.7	5.7	7.0	**7.0**	8.0	5.1
a	Private Final Consumption Expenditure (PFCE) at constant prices: Annual Growth (per cent)	7.0	**7.0**	8.5	5.6	7.2	**7.1**	9.8	5.9
b	Gross Fixed Capital Formation (GFCF) at constant prices: Annual Growth (per cent)	7.2	**7.0**	9.5	5.8	7.1	**7.0**	8.8	5.1
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	10.4	**9.5**	15.1	7.4	10.2	**10.5**	14.1	7.2
3	Gross Fixed Capital Formation (GFCF) Rate (per cent of GDP at current market prices)	31.8	**31.5**	35.0	29.5	31.8	**31.0**	35.0	29.5
4	GVA at constant prices: Annual Growth (per cent)	6.7	**6.7**	7.5	6.1	6.9	**6.8**	7.6	6.2
a	Agriculture & Allied Activities at constant prices: Annual Growth (per cent)	3.2	**3.3**	4.3	1.8	3.2	**3.0**	5.0	1.8
b	Industry at constant prices: Annual Growth (per cent)	7.4	**7.0**	12.0	5.3	7.8	**7.6**	12.0	5.8
c	Services at constant prices: Annual Growth (per cent)	8.0	**8.0**	9.7	6.9	7.9	**7.9**	9.3	6.8
5	IIP: Quarterly Average Growth (per cent)	4.3	**4.5**	6.0	0.8	4.1	**4.3**	6.0	0.2
6	Merchandise Exports -BoP basis (in US$ bn.)	118.3	**117.2**	141.2	104.8	120.8	**119.7**	132.3	109.1
7	Merchandise Imports -BoP basis (in US$ bn.)	219.3	**219.0**	249.3	196.7	212.7	**210.0**	235.0	187.5
8	Rupee per US $ Exchange rate (end-period)	93.6	**93.9**	100.0	87.3	93.7	**94.0**	100.0	86.3
9	Crude Oil (Indian basket) price (US $ per barrel) (end-period)	84.8	**82.5**	131.5	60.0	79.2	**75.0**	126.2	50.0
10	Policy Repo Rate (end-period)	5.32	**5.25**	5.75	5.25	5.35	**5.25**	5.75	5.00

Annex 5: Forecasts of CPI Combined Inflation

(per cent)

	CPI Combined (General)				CPI Combined excluding Food and Beverages, Pan, Tobacco and Intoxicants and Fuel and Light			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Q4:2025-26	3.1	**3.1**	4.0	2.4	3.8	**3.5**	4.8	3.1
Q1:2026-27	4.1	**4.1**	5.0	3.4	4.0	**4.0**	5.1	3.4
Q2:2026-27	4.3	**4.4**	5.0	3.6	4.1	**4.1**	4.8	3.4
Q3:2026-27	4.7	**4.7**	5.4	3.7	4.2	**4.3**	5.0	3.3
Q4:2026-27	4.2	**4.2**	5.2	2.7	4.0	**4.0**	4.9	2.8

Annex 6: Forecasts of WPI Inflation

(per cent)

	WPI All Commodities				WPI Non-food Manufactured Products			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Q4:2025-26	2.1	**2.3**	3.2	0.1	2.9	**3.4**	4.0	1.2
Q1:2026-27	4.7	**4.5**	10.7	1.0	3.8	**3.8**	8.2	1.4
Q2:2026-27	5.0	**5.3**	11.4	1.0	4.0	**3.7**	9.1	1.5
Q3:2026-27	4.9	**5.5**	8.1	1.0	4.1	**4.0**	9.6	1.5
Q4:2026-27	3.6	**3.7**	6.8	0.3	3.0	**2.8**	7.8	0.7

Annex 7: Mean probabilities attached to possible outcomes of Real GDP growth

Growth Range	Forecasts for 2025-26	Forecasts for 2026-27	Forecasts for 2027-28
12.0 per cent or more	0.00	0.00	0.00
11.5 to 11.9 per cent	0.00	0.00	0.00
11.0 to 11.4 per cent	0.00	0.00	0.00
10.5 to 10.9 per cent	0.00	0.00	0.00
10.0 to 10.4 per cent	0.00	0.00	0.00
9.5 to 9.9 per cent	0.00	0.00	0.00
9.0 to 9.4 per cent	0.00	0.00	0.00
8.5 to 8.9 per cent	0.00	0.00	0.01
8.0 to 8.4 per cent	0.04	0.00	0.03
7.5 to 7.9 per cent	0.46	0.05	0.11
7.0 to 7.4 per cent	0.31	0.28	0.36
6.5 to 6.9 per cent	0.10	0.39	0.33
6.0 to 6.4 per cent	0.05	0.19	0.11
5.5 to 5.9 per cent	0.02	0.05	0.03
5.0 to 5.4 per cent	0.01	0.02	0.01
4.5 to 4.9 per cent	0.01	0.01	0.00
4.0 to 4.4 per cent	0.00	0.00	0.00
3.5 to 3.9 per cent	0.00	0.00	0.00
3.0 to 3.4 per cent	0.00	0.00	0.00
2.5 to 2.9 per cent	0.00	0.00	0.00
2.0 to 2.4 per cent	0.00	0.00	0.00
1.5 to 1.9 per cent	0.00	0.00	0.00
1.0 to 1.4 per cent	0.00	0.00	0.00
0.5 to 0.9 per cent	0.00	0.00	0.00
0.0 to 0.4 per cent	0.00	0.00	0.00
below 0.0 per cent	0.00	0.00	0.00

Note: The sum of the probabilities may not add up to one due to rounding off.

Annex 8: Mean probabilities attached to possible outcomes of CPI (Combined) inflation

Inflation Range	Forecasts for Q4:2025-26	Forecasts for Q1:2026-27	Forecasts for Q2:2026-27	Forecasts for Q3:2026-27
9.0 per cent or above	0.00	0.00	0.00	0.00
8.5 to 9.0 per cent	0.00	0.00	0.00	0.00
8.0 to 8.4 per cent	0.01	0.00	0.00	0.00
7.5 to 7.9 per cent	0.02	0.01	0.01	0.00
7.0 to 7.4 per cent	0.01	0.02	0.02	0.02
6.5 to 6.9 per cent	0.00	0.01	0.02	0.03
6.0 to 6.4 per cent	0.01	0.00	0.01	0.03
5.5 to 5.9 per cent	0.01	0.02	0.03	0.06
5.0 to 5.4 per cent	0.02	0.06	0.13	0.23
4.5 to 4.9 per cent	0.03	0.24	0.35	0.35
4.0 to 4.4 per cent	0.03	0.37	0.27	0.20
3.5 to 3.9 per cent	0.13	0.18	0.13	0.08
3.0 to 3.4 per cent	0.58	0.03	0.03	0.00
2.5 to 2.9 per cent	0.10	0.03	0.01	0.00
2.0 to 2.4 per cent	0.04	0.01	0.00	0.00
1.5 to 1.9 per cent	0.01	0.00	0.00	0.00
1.0 to 1.4 per cent	0.00	0.00	0.00	0.00
0.5 to 0.9 per cent	0.00	0.00	0.00	0.00
0.0 to 0.4 per cent	0.00	0.00	0.00	0.00
-0.5 to -0.1 per cent	0.00	0.00	0.00	0.00
-1.0 to -0.6 per cent	0.00	0.00	0.00	0.00
Below -1.0 per cent	0.00	0.00	0.00	0.00

Note: The sum of the probabilities may not add up to one due to rounding off.

Note: CPI: Consumer Price Index; GDP: Gross Domestic Products; GFCF: Gross Fixed Capital Formation; GVA: Gross Value Added; IIP: Index of Industrial Production; PFCE: Private Final Consumption Expenditure; WPI: Wholesale Price Index.

ANNEXURE-3
Unit Rate Basis for Multi-Level Car Parking

Mechanized MLCP Project Cost

The total project cost of setting up Mechanized MLCP in Gujrat, will be ~USD 11.5 million (INR 96 Cr) for a total capacity of ~1,300 cars at a time

The total area for the project to be viable is estimated to be around 43,500 sq. ft. providing a total parking area of around 2,17,000 sq. ft.

The expected breakeven period for both categories of MLCP is expected to be between 8-10 years

The project costs for these developments align with those of upcoming MLCPs in various parts of India. Notable examples include the Connaught Place MLCP in Delhi, with an estimated cost of approximately USD 12 million (INR 100 Cr) set for completion by 2024. Similarly, the C.G. Road MLCP in Ahmedabad, projected for 2029, has an expected cost of about USD 9.5 million (INR 80 Cr), and the Banjara Hills MLCP in Hyderabad, scheduled for completion by 2028, is budgeted at roughly USD 12 million (INR 100 Cr)

Project specifications	Details
Plot Area	43,500Sq. ft.
Land Cost	To be provided by govt. of Gujarat
Total Construction Cost	~INR 30.0 Cr
Equipment Cost for automated parking	~INR 58.0 Cr
Other Misc. Cost	~INR 8.0 Cr
Total	**~INR 96 Cr**

MLCP Rate			
S.No	**Paramater**	**Value**	**Unit**
1	Estimate for 1300 slots	96.00	Crores
2	Rate per slot	7,38,461.54	Rs
Unit Rate for CP-4		**7,38,461.00**	

सत्यमेव जयते
Government of Gujarat

Vibrant GUJARAT 10-12 Jan 2024
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Urban Development & Urban Housing Department

Setting up Multi-level Car Parking in Residential and Commercial areas

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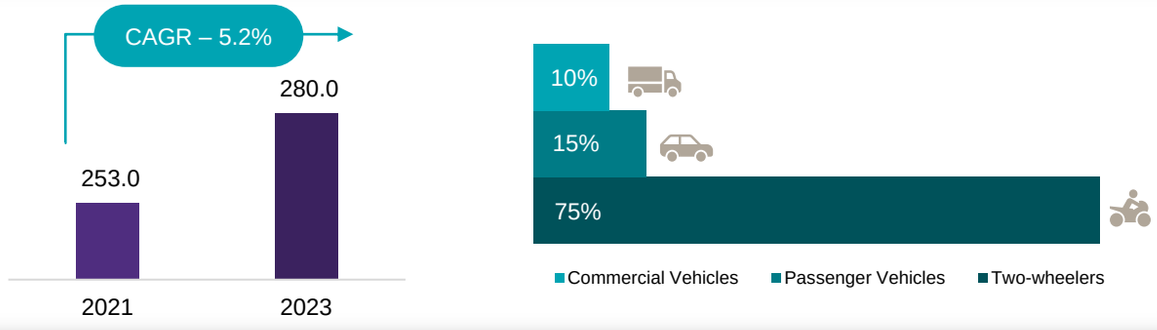
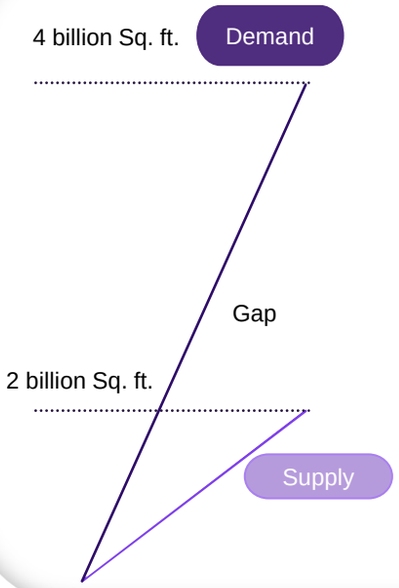
Parking Scenario in India

- India is experiencing a significant surge in car ownership, making it one of the world's fastest-growing car markets
- According to data from the Ministry of Road Transport and Highways, the number of registered vehicles in India has risen from 253 million in 2021 to over 280 million in 2023, with two-wheelers accounting for approximately 75% of these vehicles, passenger vehicles making up 15%, and commercial vehicles constituting around 10% However, this rapid growth in vehicle ownership has outpaced the expansion of parking infrastructure, leading to a critical shortage of parking spaces in Indian cities[1]
- A study by the National Institute of Urban Planning highlights that Indian cities require approximately 4 billion square feet of parking space, yet the available space only amounts to 2 billion square feet[2]
- This shortfall has given rise to parking chaos in many metropolitan areas, leading to traffic congestion, increased pollution, and a higher incidence of road accidents

Registered Vehicles in India[1] (million)



Problems Related to Parking



As India's automobile industry continues to grow, addressing these parking challenges becomes imperative to ensure urban mobility and safety

Shortage of parking spaces, resulting in parking chaos and traffic congestion	Highly fragmentation and it lacks effective regulatory systems	Absence of technological parking solutions	Adverse environmental impact of increased vehicle emissions

Parking Scenario in India

Estimated Parking Demand in Indian cities[2] (2021)

City	Demand (billion sq. feet)	Supply (billion sq. feet)	Shortage (billion sq. feet)
Delhi	0.6	0.3	0.3
Mumbai	0.5	0.2	0.2
Bengaluru	0.3	0.2	0.1
Chennai	0.2	0.1	0.1
Other Cities	2.4	1.2	1.3
Total	**4.0**	**2.0**	**2.0**

- A deficiency in parking facilities within Indian urban areas results in numerous issues, such as traffic congestion, environmental pollution, and discomfort
- To address this shortage, the Indian government had launched a number of initiatives, including the Smart Cities Mission and the Atal Mission for Rejuvenation and Urban Transformation (AMRUT)
- These initiatives are aimed at improving urban infrastructure, including parking facilities
- However, more needs to be done to address the shortage of parking space in Indian cities. This includes constructing more multi-storey car parking garages, developing parking policies that encourage people to use public transportation or shared mobility options, and providing incentives for businesses to build parking spaces for their employees
- The demand for parking space in India is expected to continue to grow in the coming years, as the country's economy continues to grow, and the population continues to urbanize

Solutions to Urban Parking Problems

01 **Smart Parking Systems**
Utilize smart tech like sensors and apps for efficient parking management, aiding drivers in finding spots

02 **Multi-Modal Transportation**
Promote diverse transit modes like walking, cycling, carpooling to reduce parking demand and alleviate congestion

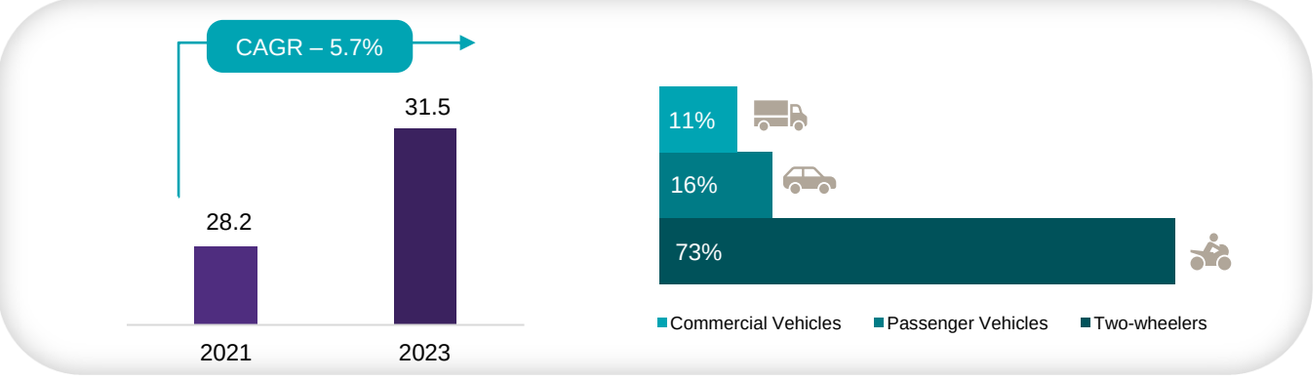
03 **Mixed-Use Development**
Encourage mixed-use development to integrate residential and commercial areas, reducing the demand for extensive parking

04 **Parking Pricing and Policies**
Use dynamic pricing for parking, varying fees by demand, and regulate supply and development requirements, reducing parking minimums

Gujarat Scenario

- Gujarat is one of the fastest-growing states in India. The state's economy is growing rapidly, and its cities are experiencing a similar increase in car ownership. This is putting a strain on existing parking infrastructure in Gujarat's cities
- According to a study by the Gujarat Urban Development Corporation, the parking space requirement in Gujarat's cities is estimated to be 0.84 billion square feet. However, the available parking space is only 0.47 billion square feet. This means that there is a shortage of over 0.37 billion square feet of parking space in Gujarat's cities[2]
- The shortage of parking spaces is particularly acute in major cities such as Ahmedabad, Surat, and Vadodara. In these cities, it is common to see cars parked on roadsides, blocking traffic and causing congestion. The shortage of parking spaces is also a major inconvenience for people who live and work in these cities

Registered Vehicles in Gujarat[3] (million)



Breakdown of the demand and supply of parking space in Gujarat's major cities[2] (2021)

City	Demand (billion sq. feet)	Supply (billion sq. feet)	Shortage (billion sq. feet)
Ahmedabad	0.34	0.17	0.17
Surat	0.12	0.06	0.06
Vadodara	0.08	0.04	0.04
Other Cities	0.30	0.20	0.10
Total	**0.84**	**0.47**	**0.37**

Growing population in major Gujarat cities intensifies demand for parking spaces, highlighting a 0.4 billion sq. ft. shortage in current infrastructure

Prevalent Solutions

In today's urban landscape, efficient parking methods have become paramount to address the growing challenges of limited space and increasing vehicle ownership

Some of the traditional parking methods include

On street parking

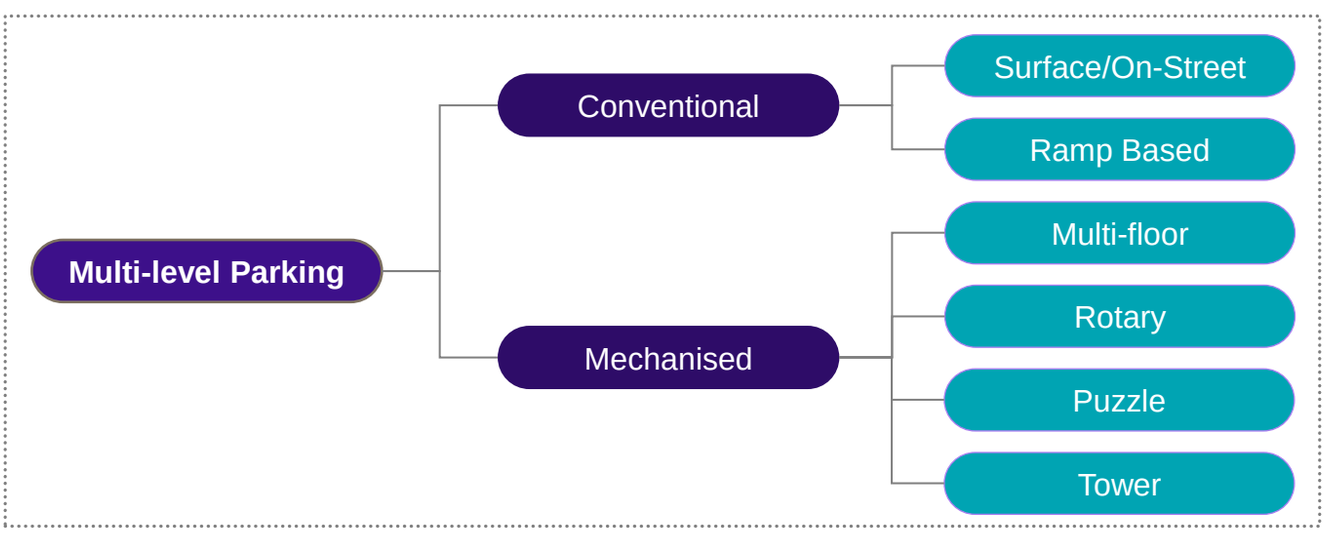
Off street parking

Parallel Parking

Traditional parking systems are struggling to meet current demands due to various factors

- The rising number of vehicles
- Inadequate footpath infrastructure
- Weak regulatory enforcement
- Vehicle owners' reluctance to pay for parking

To address these issues, advanced technologies, such as vertical space utilization and mechanized multi-level car parking systems, have become essential for efficient and space-effective parking solutions



Prevalent Solutions

Conventional Multi-level Parking

Conventional multilevel parking systems can exist either underground, above ground, or as a combination of both. Above-ground structures, commonly known as open-deck parking structures, have at least two sides open to the outside, making them more favorable than enclosed structures due to their lack of need for mechanical ventilation and specialized fire protection systems

The design of these conventional multilevel parking systems typically encompasses entry and exit ramps, car lifts, aisle/circulation space between vehicles, and designated car park areas

Automated Multilevel

In contrast to conventional multilevel parking, automated systems keep cars at one level, using steel pallets that move to the driveway for parking or retrieval. These are of four different types:

These are of four different types

Puzzle type or Modular

Multi floor

Elevator type or Tower

Rotary type

Multi-level Parking

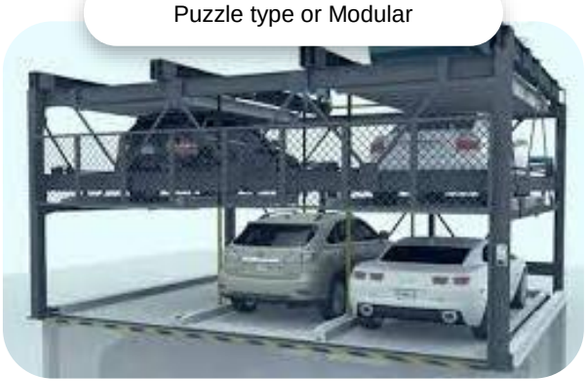
Puzzle type or Modular

- This multi-level parking system accommodates more than two levels, designed for accessibility through ground-level entrances and exits
- The parking pallet moves horizontally and vertically, ensuring at least one empty slot for movement. The system can incorporate multiple upper levels, lower pits, or a combination of both

Advantages

- Simple operation without the need for parking attendants
- Swift retrieval, typically under two minutes
- Exceptional safety and reliability with safety sensors and optional automated gates

Puzzle type or Modular



Cost per Equivalent Car Space (ECS): 4.3 Lakh[4,2]

Puzzle type or Modular

- The elevator-type, often referred to as the Parking Tower, automatically lifts vehicles on a pallet vertically, then shifts them horizontally for storage, ensuring rapid retrieval in under two minutes
- Suitable for medium to large buildings or standalone parking businesses, it's controlled by an integrated computer system, offering user-friendly operation.

Advantages

- Requires minimal land space; a 25'x22' area can park up to 72 vehicles
- Operates quietly with minimal vibration, thanks to the use of urethane rollers.
- Entry and exit are quick and convenient, aided by a built-in turntable and sub-two-minute retrieval
- Equipped with multiple sensors and triple safety measures, ensuring a high level of safety
- Can store cue memory for multiple patrons during peak hours

Elevator type or Tower

Cost per Equivalent Car Space (ECS): 4.8 Lakh[4,2]

Multi-level Parking

Multi floor parking

- The Multi-Parking system automatically moves vehicles via lifts, transferring them to waiting carts on multiple levels. Carts then move horizontally to place vehicles in their designated slots
- This system is ideal for medium to large-scale buildings and independent public parking garages. It can accommodate as few as 20 vehicles or several thousand, making it suitable for large projects. It can efficiently move more than two vehicles simultaneously

Advantages

- Quick entry and exit as each elevator and cart operates independently on each level, with retrieval in under two minutes
- Minimal noise and vibration due to the use of urethane rollers, ensuring a quiet operation during pallet transfers
- Convenience with a built-in turntable on each elevator
- Equipped with multiple sensors and triple safety measures, providing a high level of safety and reliability
- Can store cue memory for multiple patrons retrieving their vehicles during rush hours

Multi floor

Cost per Equivalent Car Space (ECS): 6.1 Lakh[4,2]

Rotary

- An optimal solution for maximizing parking space efficiency. It can accommodate 7, 8, 10, or 12 vehicles in the space of just 2 without requiring an attendant
- Users simply insert the key, press their parking space number, and the pallet rotates clockwise or counterclockwise based on the space number

Advantages

- Accommodates up to 12 vehicles in the space of two
- Complies with building coverage regulations
- Operates with a simple one-touch method, eliminating the need for an attendant
- Bi-directional rotation for quick retrieval, detecting the closer vehicle
- Exceptionally safe and reliable with an endless chain and pallet drop prevention system to prevent vehicle falls

Rotary type

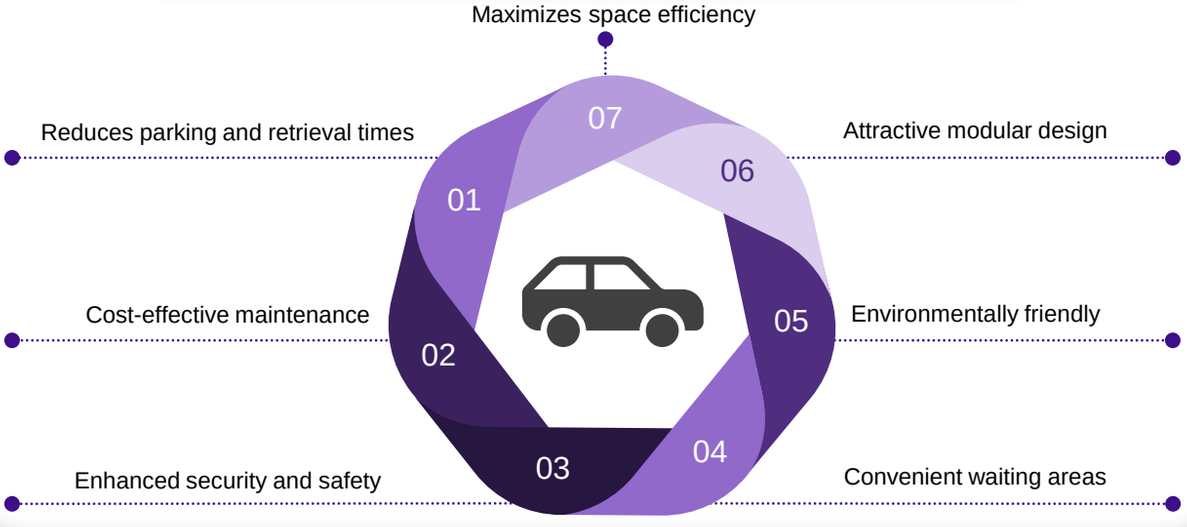
Cost per Equivalent Car Space (ECS): 4.3 Lakh[4,2]

Project Information

Setting up Multi-level Car Parking on PPP

A multi-level car parking system is a modern, space-efficient solution to urban parking challenges. It utilizes vertical space for parking, optimizing land use and providing convenient, secure parking options

Advantages of Automated Multi Level Car Parking System



Why Multi-level Car Parking for Gujarat?

Gujarat is a rapidly developing state, and its cities are experiencing an increase in car ownership. This is putting a strain on existing parking infrastructure, and it is clear that new solutions are needed. Multistorey car parking garages are one of the best ways to address this problem

Reduce congestion in major cities	Improve air quality	Boost tourism	Create jobs

Project Information

Mode of operation — **Public-private Partnership (PPP)**

Rationale for PPP model

A PPP model is ideal for MLCP projects due to the following key advantages:

Efficient Resource Utilization (01)

With a limited availability of government funds and a substantial project wish list, PPPs allow for the development of essential infrastructure projects without significant government investment. This ensures the efficient use of available resources

Private Sector Efficiency (02)

The involvement of the private sector brings efficiency, market responsiveness, and accountability to project execution and operation. Private developers are motivated to optimize returns, leading to streamlined project management and service delivery

Focus on Market Demand (03)

The flexibility within PPPs enables developers to respond to market demand effectively. They can build projects based on market requirements, thereby optimizing collective returns

Timely Implementation (04)

PPPs facilitate the development of priority projects within a defined timeline. Private sector involvement ensures timely execution and ongoing management with modern amenities and supporting infrastructure

Commercial Benefits (05)

PPPs offer opportunities for governments to optimize commercial benefits without utilizing their resources. Revenue streams, such as parking fees, lease rentals, user charges, and advertising, provide a source of income that can be reinvested in funding other projects

Project Funding (06)

Private sector developers fund the project, reducing the burden on government finances. This approach aligns with the optimization of commercial benefits and private sector investment

PPPs offer an efficient and commercially viable approach to implementing MLCP projects, allowing governments to address urban infrastructure needs without a significant financial burden. Private sector participation ensures timely execution and efficient operation, enhancing the overall quality of services provided

Project Information

Types of Multi-level | **Conventional** | **Mechanized**

Technical specifications

- Technical specifications for the proposed development offer two technology options: Hydraulic and electro-mechanical systems
- The choice between them depends on site conditions, budget, traffic, and capacity

Lift Types

- **Hydraulic Type**: Uses a hydraulic cylinder, suitable for parking systems with fewer than four levels, requires less pit area, operates quietly and stably.
- **Wire Rope Type**: Provides faster operations and accommodates parking systems with more than four levels. Requires more pit area due to balance weight needs.

Revenue Streams

Key Revenue Streams for Multi-level Car Parking (MLCPs) include parking fees, advertisement rights, and renting commercial space like kiosks, ATMs, and retail outlets. These revenue sources are viable due to the secure parking environment provided by MLCPs. Demand assessment will confirm their feasibility.

Revenue Categories

Commercial Space
Ideal for kiosks, ATMs, Telephone Booths, and retail outlets

Parking Fees
Enhanced charges for sheltered parking

Advertisement Space
Growing market potential for advertisements, particularly in prime commercial areas of major cities. Street venues like MLCPs can be utilized for advertising

Project Information

Proposed Locations

Gujarat, known for its thriving cities and rapid urbanization, is witnessing a significant surge in vehicle ownership. With more vehicles hitting the streets, various Gujarat cities can be potential sites for establishing Multi-level Car Parking. Most suitable locations for the project include:

Project Information

Ahmedabad

Ahmedabad is the largest city in Gujarat and is experiencing a rapid increase in car ownership. The city has a number of congested areas where multi-level car parking would be beneficial. Some specific locations in Ahmedabad where multi-level car parking could be started include:

Near the Sabarmati Riverfront

The Sabarmati Riverfront is a popular tourist destination and is also home to a number of businesses and government offices. Multi-level car parking garages in this area would help to reduce congestion and make it easier for people to visit the riverfront

Near the Gujarat International Finance Tec-City (GIFT City)

GIFT City is a new financial hub in Ahmedabad and is expected to attract a large number of businesses and individuals. Multi-level car parking garages in this area would help to meet the parking needs of the people who work and visit GIFT City

Near major shopping malls and commercial centers

Ahmedabad has a number of major shopping malls and commercial centers. Multi-level car parking garages near these locations would help to reduce congestion and make it easier for people to visit these areas

Surat

Surat is the second largest city in Gujarat and is also experiencing a rapid increase in car ownership. The city has several congested areas where multi-level car parking would be beneficial. Some specific locations in Surat where multi-level car parking could be started include:

Near the Surat Diamond Bourse

The Surat Diamond Bourse is one of the largest diamond exchanges in the world. Multi-level car parking garages in this area would help to reduce congestion and make it easier for people to visit the diamond exchange

Near the Surat Railway Station

The Surat Railway Station is one of the busiest railway stations in Gujarat. Multi-level car parking garages in this area would help to reduce congestion and make it easier for people to get to and from the railway station

Near major shopping malls and commercial centers

Surat has a number of major shopping malls and commercial centers. Multi-level car parking garages near these locations would help to reduce congestion and make it easier for people to visit these areas

Vadodara

Vadodara is the third largest city in Gujarat and is also experiencing a rapid increase in car ownership. The city has a number of congested areas where multi-level car parking would be beneficial. Some specific locations in Vadodara where multi-level car parking could be started include:

Near the Laxmi Vilas Palace

The Laxmi Vilas Palace is a popular tourist destination in Vadodara. Multi-level car parking garages in this area would help to reduce congestion and make it easier for people to visit the palace

Near the Sayaji Baug

The Sayaji Baug is a large public park in Vadodara. Multi-level car parking garages in this area would help to reduce congestion and make it easier for people to visit the park

Near major shopping malls and commercial centers

Vadodara has a number of major shopping malls and commercial centers. Multi-level car parking garages near these locations would help to reduce congestion and make it easier for people to visit these areas

In addition to these major cities, there are several other cities and towns in Gujarat where multi-level car parking could be started. The specific locations in these cities and towns would need to be identified based on the local demand for parking space

Project Information

Implementation Structure

For implementing MLCP projects, assessing their technical and financial viability is essential. The proposed PPP structure outlines the roles of the Urban Local Bodies (ULBs) and Selected Developers as follows

Role of ULBs

- Identification of suitable locations
- Coordinating with relevant authorities for clearances
- Standardizing parking fees and performance criteria
- Collecting parking fees and providing advertisement rights to developers

Role of Developer

- Designing, financing, constructing, operating, maintaining, and managing facilities, including necessary infrastructure
- Complying with Competent Authority requirements

Standards and Specifications

The MLCP facilities will include but are not limited to:

- Mechanized Parking Facility
- Adequate Car Lifts
- Computerized Toll Plaza/Booths
- Commercial space as per local bye-laws

The design criteria and specifications must adhere to the latest Indian Standards, codes, and recommendations from the Indian Bureau of Standards, ensuring functionality, service conditions, and provisions for future expansion

In MLCP projects, the developer must provide fire-fighting equipment, ensure proper ventilation and lighting for safety, and employ an efficient automation system to manage parking operations. These measures enhance safety, functionality, and land optimization in urban areas.

Project Financials

Conventional type MLCP Project Cost

The total project cost of setting up Conventional type MLCP in Gujrat, will be ~USD 6.1 million (INR 50 Cr) for a total capacity of ~1,300 cars at a time

The total area for the project to be viable is estimated to be around 43,500 sq. ft. providing a total parking area of around 2,17,000 sq. ft.

Project specifications	Details
Plot Area	43,500 sq. ft.
Land Cost	To be provided by govt. of Gujarat
Total Construction Cost	~INR 30.5 Cr
Equipment Cost	~INR 11.5 Cr
Other Misc. Cost	~INR 7.5 Cr
Total	**~INR 50 Cr**

Mechanized MLCP Project Cost

The total project cost of setting up Mechanized MLCP in Gujrat, will be ~USD 11.5 million (INR 96 Cr) for a total capacity of ~1,300 cars at a time

The total area for the project to be viable is estimated to be around 43,500 sq. ft. providing a total parking area of around 2,17,000 sq. ft.

The expected breakeven period for both categories of MLCP is expected to be between 8-10 years

The project costs for these developments align with those of upcoming MLCPs in various parts of India. Notable examples include the Connaught Place MLCP in Delhi, with an estimated cost of approximately USD 12 million (INR 100 Cr) set for completion by 2024. Similarly, the C.G. Road MLCP in Ahmedabad, projected for 2029, has an expected cost of about USD 9.5 million (INR 80 Cr), and the Banjara Hills MLCP in Hyderabad, scheduled for completion by 2028, is budgeted at roughly USD 12 million (INR 100 Cr)

Project specifications	Details
Plot Area	43,500Sq. ft.
Land Cost	To be provided by govt. of Gujarat
Total Construction Cost	~INR 30.0 Cr
Equipment Cost for automated parking	~INR 58.0 Cr
Other Misc. Cost	~INR 8.0 Cr
Total	**~INR 96 Cr**

Stakeholders and Approvals

Key Stakeholders

Project Sponsor Concerned Municipal Authority	**Nodal Department** Urban Development Department / Directorate of Municipal Administration	**Facilitating Department** Infrastructure Development Department	**City Town Planning Department**	**Traffic Police Department**	**State Electricity Board**	**Other relevant agencies as necessary**

Essential issues to be addressed

The following key issues are essential to be addressed for the success in developing of a MLCP and ensuing effective utilization of the same:

- Implement strict penalties for parking rule violations to encourage the use of designated MLCPs
- Develop a tiered parking fee structure to manage parking demand effectively
- Conduct joint inspections and reviews of locations with key stakeholders to enhance project success

Clearances and Sanctions

The following clearances and sanctions for the proposed project from various agencies would be required:

- Concerned Municipal Authority
- Traffic Police Department
- State Electricity Board
- Water Supply & Sewerage Board
- Urban Development Authority
- Other agency as deemed necessary

Risk Allocation and Mitigation

- Mitigation of design and development risk through standardized designs
- Mitigation of construction risk through effective contractual clauses and timely clearances
- Pre-feasibility assessment to address demand risk
- Involvement of the private sector for transferring commercial and revenue risk
- Mitigation of political risk through legal documentation and insurance
- Anticipated environmental risk is minimal due to environmentally friendly design considerations

Incentives

Gujarat government is providing several incentives for the development of MLCPs on a public-private partnership (PPP) basis. These incentives include

01

Land at concessional rates

The Gujarat government is providing land at concessional rates to private developers who are interested in developing MLCPs on a PPP basis. This can help to reduce the cost of the project for the developer

02

Stamp duty and registration fee exemption

The government is exempting private developers from stamp duty and registration fees on the transfer of land for the development of MLCPs on a PPP basis. This can further reduce the cost of the project for the developer

03

Property tax exemption for a period of 10 years

Government is exempting private developers from property tax on MLCPs that are developed on a PPP basis for a period of 10 years. This can help to improve the profitability of the project for the developer

04

Permission to charge higher parking fees

The government is allowing private developers to charge higher parking fees at MLCPs that are developed on a PPP basis. This can help to generate more revenue for the developer

Additional Support

In addition to these incentives, the Gujarat government is also providing other support to private developers who are interested in developing MLCPs on a PPP basis. This support includes:

Technical assistance

The government is providing technical assistance to private developers on the planning and design of MLCPs

Financial assistance

The Government is providing financial assistance to private developers in the form of loans and grants

Marketing support

It is providing marketing support to private developers to promote the use of MLCPs

The Gujarat government is committed to the development of MLCPs on a PPP basis and is providing several incentives and support to private developers. This is expected to encourage more private investment in the development of MLCPs and help to address the parking shortage in Gujarat.

Sources

S.No.	Source
1	Ministry Of Road Transport And Highways, Government Of India ;and IJCRT: A study on smart parking management system in India
2	Grant Thornton Analysis
3	Commissionerate of Transport, Government of Gujarat
4	KSIIDC-IL&FS Project Development Company: Prefeasibility Report for development of multi-level car parking facilities

Notes

Urban Development & Urban Housing Department

https://udd.gujarat.gov.in/

Gujarat Infrastructure Development Board (GIDB)

https://www.gidb.org/

Industries and Mines department - Gujarat

https://imd.gujarat.gov.in/

Gujarat Industrial Development Corporation

https://gidc.gujarat.gov.in/

This project profile is constructed based on an initial analysis with the intention of offering prospective entrepreneurs an initial assessment of the potential scope. However, it is strongly advised that a comprehensive feasibility study be carried out prior to making a final investment decision.

For further details, please contact:

iNDEXTb
INDUSTRIAL EXTENSION BUREU
(A GOVT OF GUJARAT ORGANISATION)
ISO 9001 2000 Certified

Block No. 18, 2nd Floor, Udyog Bhavan,
Sector 11, Gandhinagar 382 010

+91-79-2325 6009, 2325 0492 / 93
indextb@indextb.com
www.indextb.com

Urban Development &
Urban Housing Department
Government of Gujarat

Urban Development & Urban Housing Department,
Government of Gujarat
14th Block, 9th Floor, Sachivalaya,
Gandhinagar 382 010
+91-79-23251001
securban@gujarat.gov.in
https://udd.gujarat.gov.in

ANNEXURE-4
Rate calculation for Airside Pavements

Airside pavements - Rate based 3rd CP finalised rate Evaluation for 4th CP				
S.No	**Paramater**	**Value**	**Unit**	**Remarks**
1	Unit Rate as per CP-3 (FY 22-FY 26)	10,517.12	Rs/Sqm	Normative Cost as per AERA Tariff Order for CP-3
2	WPI based inflation Upto FY 25	3.58	Percentage	As per Chapter 5 para 5.1 (H)
3	WPI based inflation for FY 26	0.90	Percentage	As per Chapter 5 para 5.1 (I)
4	WPI based inflation for FY 27	4.70	Percentage	As per Chapter 5 para 5.1 (I)
5	WPI based inflation for FY 28 FY 29	3.60	Percentage	As per Chapter 5 para 5.1 (I)
6	Unit Rate for FY 25	11,283.62	Rs/Sqm	
7	Unit Rate for FY 26	11,385.18	Rs/Sqm	
8	Unit Rate for FY 27 to FY 29	12,793.99	Rs/Sqm	
Unit Rate for CP-4		**12,793.99**		

ANNEXURE-5
Unit Rate Calculation for Ancillary Building Works

CAPEX Evaluation for 4th CP						
Sr. No.	**Description of Item**	**Quantity**	**Unit**	**Rate (Rs.)**	**Amount (Rs.)**	**Rate Reference / Assumptions**
	Rate for Building Works (Per Sqm)					
	Built-up Area	**1.00**	**Sqm.**			
	Superstructure	**1.00**	**Sqm.**			
I	**PAR ITEMS**					
Reference as per PAR)						
1.0	**RCC FRAMED STRUCTURES**					
1.1	RCC Framed structure upto 6 storeys					
1.1.1	Floor Height 3.6 mt.	1.00	Sqm.	30,920.00	30,920.00	CPWD PAR 2025/ Annexure -I / Sr. No. 1.1.1
	(Rate as per Annexure-I of PAR 2025)					
1.3	**EXTRA FOR**					
1.3.2	**Every 0.3 mt additional height of floor above normal floor height of 3.60 mt**					
a	For floor height 5.0 m (For upper floors in superstructure)	1.00	Sqm.	1,263.00	1,263.00	CPWD PAR 2025/ Annexure -I / Sr. No. 1.3.2
	((4.5-3.6)/0.30)x434=1964.67					
1.3.3	**Every 0.3m ht. higher plinth over normal plinth height of 0.45m (on G.F. Area only)**					
	For total plinth height 1.00 m (For Ground Floor)	1.00	Sqm.	861.67	861.67	CPWD PAR 2025/ Annexure -I / Sr. No. 1.3.3
	((1.0-0.45)/0.30)x470=861.67					
1.3.4	**Every 0.30 mt deeper foundations over normal depth of 1.20 metre (on G.F. area only)**					
a	For total foundation depth 2 m (For Ground Floor)	1.00	Sqm.	546.67	546.67	CPWD PAR 2025/ Annexure -I / Sr. No. 1.3.4
	((2-1.20)/0.30)x205=160					
1.3.5	**Making Stroger foundations to take load of 1 additional floor at a later date (on area of additional floor only)**	1.00	sqm	1,800.00	1,800.00	CPWD PAR 2025/ Annexure -I / Sr. No. 1.3.5
1.3.6	**RCC Raft Foundations (Ground Floor Only)**	1.00	Sqm.	12,765.00	12,765.00	CPWD PAR 2025/ Annexure -I / Sr. No. 1.3.6

CAPEX Evaluation for 4th CP						
Sr. No.	**Description of Item**	**Quantity**	**Unit**	**Rate (Rs.)**	**Amount (Rs.)**	**Rate Reference / Assumptions**
	Rate for Building Works (Per Sqm)					
1.3.9	**Stronger structural members to take heavy load above 500 Kg / Sqm. upto 1000 Kg / Sqm.**	1.00	Sqm.	2,070.00	2,070.00	CPWD PAR 2025/ Annexure -I / Sr. No. 1.3.9
1.5	**FIRE FIGHTING**					
1.5.1	Downcomer System	1.00	Sqm.	460.00	460.00	CPWD PAR 2025/ Annexure -I / Sr. No. 1.5.1
1.5.3	With Wet Riser and Sprinkler System	1.00	Sqm.	1,200.00	1,200.00	CPWD PAR 2025/ Annexure -I / Sr. No. 1.5.3
1.6	**FIRE ALARM SYSTEM**					
1.6.2	Automatic Fire Alarm System	1.00	sqm	600.00	600.00	CPWD PAR 2025/ Annexure -I / Sr. No. 1.6.2
1.7	**Pressurized Mechanical Ventilation in basements with supply duct of exhaust blowers (on basement area only)**	1.00	sqm	1,050.00	1,050.00	CPWD PAR 2025/ Annexure -I / Sr. No. 1.7
	SUB TOTAL - BUILDING COST				**53,536.33**	
2	**SERVICES**					
2.1	INTERNAL WATER SUPPLY & SANITARY INSTALLATIONS	34,094.67	%	4%	1,364	CPWD PAR 2025/ Annexure -I / Sr. No. 2.1
2.2	EXTERNAL SERVICE CONNECTIONS					
2.2.1	Electrical External Service Connections	34,094.67	%	3.75%	1,279	CPWD PAR 2025/ Annexure -I / Sr. No. 2.2.1
2.2.2	Civil External Service Connections	34,094.67	%	1.25%	426	CPWD PAR 2025/ Annexure -I / Sr. No. 2.2.2
2.2.3	Local Body Approvals including Tree Cutting	34,094.67	%	1.25%	426	CPWD PAR 2025/ Annexure -I / Sr. No. 2.2.2
2.3	INTERNAL ELECTRICAL INSTALLATIONS	34,094.67	%	12.5%	4,262	CPWD PAR 2025/ Annexure -I / Sr. No. 2.3
2.4	**EXTRA FOR:**					
2.4.1	Power Wiring and Plugs	34,094.67	%	**4%**	1,364	CPWD PAR 2025/ Annexure -I / Sr. No. 2.4.1

CAPEX Evaluation for 4th CP						
Sr. No.	**Description of Item**	**Quantity**	**Unit**	**Rate (Rs.)**	**Amount (Rs.)**	**Rate Reference / Assumptions**
	Rate for Building Works (Per Sqm)					
2.4.2	Lightining Conductors	34,094.67	%	**0.25%**	85	CPWD PAR 2025/ Annexure -I / Sr. No. 2.4.2
2.4.3	Telephone Conduits	34,094.67	%	**0.25%**	85	CPWD PAR 2025/ Annexure -I / Sr. No. 2.4.3
3.1	**TPQA & CONSULTANCY SERVICES (Percentage below refers to the percentage of building cost**					
3.1.1	Third Party Quality Assurance	62,827.13	%	**1%**	628	CPWD PAR 2025/ Annexure -I / Sr. No. 2.4.4
3.1.2	Consultancy Services for Planning and Designing of Projects	62,827.13	%	**1.75%**	1,099	CPWD PAR 2025/ Annexure -I / Sr. No. 2.4.5
	Sub Total - Services				**11,018.54**	
	Total of PAR ITEMS (A)				**64,554.88**	
	RATE with Cost Index (5%)				**67,782.62**	
	Rate with Escalation as per RBI Index(INR) with GST				**76,855.63**	
	Final Rate				**76,855.63**	

ANNEXURE-6
Unit Rate Calculation for Road Works

CAPEX Evaluation for 4th CP

RATE FOR ROAD WORKS

S. No.	CPWD DSR ITEM REFERENCE	ITEM DESCRIPTION	Nos	Quantity in SQM	Layer Depth	Total Quantity	Unit	Rate (INR)	Rate (INR) w/o GST	Rate (INR) with Cost Index	Rate (INR) with Escalation for 2 Years till 2025	Present Rate (INR) with GST	Rate with Escalation till FY29 as per RBI Index(INR) with GST	Amount (Rs.)
PAVEMENT WORKS														
1		**Granular Sub Base**												
	16.78	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineerin-Charge.												
	16.78.1	With material conforming to Grade-I (size range 75 mm to 0.075 mm) having CBR Value-30												
		Roads												
	1	Main Carraigeway	1	7,500.00	0.20	1,500.00								
	2	Paved Shoulder	1	3,000.00	0.20	600.00								
	3	Earthen Shoulder	1	2,000.00	0.20	400.00								
		Total Quantity				**2,500.00**	**Cum**	**2,784.00**	**2,295.71**	**2,410.50**	**2,586.18**	**3,051.69**	**3,351.34**	**83,78,353.74**
2		**WET MIX MACADAM**												
	16.79	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paver finisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achievethe desired density, complete as per specifications and directions of Engineer-in-Charge.												
		Airside Pavements												
	1	Main Carraigeway	1	7,500.00	0.25	1,875.00								
	2	Paved Shoulder	1	3,000.00	0.29	870.00								
	3	Earthen Shoulder	1	-	0.25	-								
		Total Quantity				**2,745.00**	**cum**	**2,914.30**	**2,403.16**	**2,523.32**	**2,707.22**	**3,194.52**	**3,508.19**	**96,29,994.92**
3		**PRIMER COAT**												
	16.30	Providing and applying tack coat using hot straight run bitumen of grade VG - 10, including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications :												
	16.30.1	On W.B.M. @ 0.75 Kg / sqm												
		Airside Pavements												
	1	Main Carraigeway	1	7,500.00		7,500.00								
	2	Paved Shoulder	1	3,000.00		3,000.00								
	3	Earthen Shoulder	1	-		-								
		Total Quantity				**10,500.00**	**Sqm**	**60.50**	**49.89**	**52.38**	**56.20**	**66.32**	**72.83**	**7,64,705.35**
4		**TACK COAT (ON GRANULAR SURFACES)**												
	16.31	Providing and applying tack coat using bitumen emulsion conforming to IS:8887, using emulsion pressure distributer including preparing the surface & cleaning with mechanical broom.												
	16.31.1	With rapid setting bitumen emulsion												
	16.31.1.1	On W.B.M / W.M.M. @ 0.4kg/sqm												
		Airside Pavements												
	1	Main Carraigeway	2	7,500.00		15,000.00								
	2	Paved Shoulder	2	3,000.00		6,000.00								
	3	Earthen Shoulder	1	-		-								

CAPEX Evaluation for 4th CP

RATE FOR ROAD WORKS

S. No.	CPWD DSR ITEM REFERENCE	ITEM DESCRIPTION	Nos	Quantity in SQM	Layer Depth	Total Quantity	Unit	Rate (INR)	Rate (INR) w/o GST	Rate (INR) with Cost Index	Rate (INR) with Escalation for 2 Years till 2025	Present Rate (INR) with GST	Rate with Escalation till FY29 as per RBI Index(INR) with GST	Amount (Rs.)
		Total Quantity				**21,000.00**	**Sqm**	**13.45**	**11.09**	**11.65**	**12.49**	**14.74**	**16.19**	**3,40,009.48**
5		**TACK COAT (ON BITUMINOUS SURFACES)**												
	16.31	Providing and applying tack coat using bitumen emulsion conforming to IS:8887, using emulsion pressure distributer including preparing the surface & cleaning with mechanical broom.												
	16.31.1	With rapid setting bitumen emulsion												
	16.31.1.2	On bituminous surface @ 0.25kg/sqm												
		Airside Pavements												
	1	Main Carraigeway	2	7,500.00		15,000.00								
	2	Paved Shoulder	1	3,000.00		3,000.00								
	3	Earthen Shoulder	1	-		-								
		Total Quantity				**18,000.00**	**Sqm**	**9.20**	**7.59**	**7.97**	**8.55**	**10.08**	**11.07**	**1,99,347.04**
6		**Dense Graded Bituminous Macadam (GRADING-II)**												
	16.54	Providing and laying Dense Graded Bituminous Macadam using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equiped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specificatons and directions of Engineer-in-Charge.												
	16.54.1	50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity												
		Airside Pavements												
	1	Main Carraigeway	1	7,500.00	0.035	262.50								
	2	Paved Shoulder	1	3,000.00	-	-								
	3	Earthen Shoulder	1	-		-								
		Total Quantity				**262.50**	**Cum**	**11,129.55**	**9,177.54**	**9,636.42**	**10,338.73**	**12,199.70**	**13,397.60**	**35,16,870.41**
7		**DAC**												
	16.57	Providing and laying Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equiped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge												
	16.57.6	40/50 mm compacted thickness with bitumen of grade VG- 30 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) and waste plastic additive @ 8% (percentage by weight of bitumen) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.												
		Airside Pavements												
	1	Main Carraigeway	1	7,500.00	0.030	225.00								
	2	Paved Shoulder	1	3,000.00	0.025	75.00								
	3	Earthen Shoulder	1	-		-								
		Total Quantity				**300.00**	**Cum**	**12,609.30**	**10,397.75**	**10,917.64**	**11,713.34**	**13,821.74**	**15,178.90**	**45,53,671.37**
10		Road Markings												
	16.48	Painting road surface marking with adequate nos of coats to give uniform finish with ready mixed road marking paint conforming to IS : 164, on bituminous surface in white/yellow shade, including cleaning the surface of all dirt, scales, oil, grease and foreign material etc. complete.												
	16.48.1	New work (Two or more coats)												
		10% of Surface Area of Roads				**1,050.00**								

CAPEX Evaluation for 4th CP

RATE FOR ROAD WORKS

S. No.	CPWD DSR ITEM REFERENCE	ITEM DESCRIPTION	Nos	Quantity in SQM	Layer Depth	Total Quantity	Unit	Rate (INR)	Rate (INR) w/o GST	Rate (INR) with Cost Index	Rate (INR) with Escalation for 2 Years till 2025	Present Rate (INR) with GST	Rate with Escalation as per RBI Index(INR) with GST	Amount (Rs.)
		Total Quantity				**1,050.00**	**Sqm**	**288.90**	**238.23**	**250.14**	**268.37**	**316.68**	**347.77**	**3,65,162.60**
11	2.25 (a)	Excavating, supplying, stacking and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in foundation trenches, plinth, sides of foundation etc. complete for all lift.												
	1	Main Carraigeway	1	7,500.00	0.50	3,750.00								
	2	Paved Shoulder	1	3,000.00	0.50	1,500.00								
	3	Earthen Shoulder	1	2,000.00	0.50	1,000.00								
		Total Quantity				**6,250.00**	**cum**	**700.50**	**577.64**	**606.52**	**650.73**	**767.86**	**843.25**	**52,70,327.58**
12	16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earthwith lead upto 50 metres.												
	1	Main Carraigeway	1	7,500.00		7,500.00								
	2	Paved Shoulder	1	3,000.00		3,000.00								
	3	Earthen Shoulder	1	2,000.00		2,000.00								
		Total Quantity				**12,500.00**	**sqm**	**218.90**	**180.51**	**189.53**	**203.35**	**239.95**	**263.51**	**32,93,860.69**
TOTAL COST OF 2 LANE ROAD														**3,63,12,303.17**
UNIT RATE PER LANE/PER KILOMETER														**1,81,56,151.58**
UNIT RATE PER LANE/PERS SQM														**5,187.47**

ANNEXURE-7
Unit Rate Calculation for Elevated Structures

Project Cost Analysis - ELEVATED STRUCTURES

Sl. No.	Description	Input	Output		
			Total Cost (Cr.)	Total Cost (Rupees)	Cost Per Unit (Cr.)
1	Name of State	Telangana			
	Aggregate Lead in km	20			
8	Bridge				
	Structure No-1				
	Structure Configuration	Single Span With Pile Foundation	309.726	3,09,72,57,451	0.006
	Skew Angle in degree	0.00			
	Aggregate Lead in km.	20			
	Area in Sqm.	54774.00			
	Structure No-2				
	Structure Configuration	Multiple Span With Pile Foundation	399.791	3,99,79,08,704	0.004
	Skew Angle in degree	25.00			
	Aggregate Lead in km.	20			
	Area in Sqm.	98226.00			
13	New Jersey Crash Barrier		0.322	32,17,200	0.0002
	Length in meter	1400.00			
	Aggregate Lead in km	20			
	Total Project Cost		709.838	7,09,83,83,355	
	Unit Rate Per SQM		46,400.000		

ANNEXURE-8
Unit Rate Calculation for Boundary Wall

CAPEX Evaluation for 4th CP

RATE PER RUNNING METER FOR BOUNDARY WALL

		Operational Boundary Wall	14,500.00	METERS											
S. No.	CPWD DSR 2023 ITEM REFERENCE	ITEM DESCRIPTION	Nos	Length	Breadth	Depth	Total Quantity	Unit	Rate (INR)	Rate (INR) w/o GST	Rate (INR) with Cost Index	Rate (INR) with Escalation for 2 Years till 2025	Present Rate (INR) with GST	Rate with Escalation as per RBI Index(INR) with GST	Amount (Rs.)
1	2.6.1	**Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge.**													
		All kinds of soil													
		Column Footing	4,834.00	1.00	1.00	1.25	6,042.50								
		In between Columns	1.00	13,291.50	0.15	0.35	697.80								
		Total					6,740.30								
		Total Quantity (70% of total excavation quantity)					**4,718.21**	**Cum**	**177.50**	**146.37**	**153.69**	**164.89**	**194.57**	**213.67**	**10,08,149.82**
2	2.7.1	**Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge**													
		Ordinary Rock													
		Column Footing	4,834.00	1.00	1.00	1.25	6,042.50								
		In between Columns	1.00	13,291.50	0.15	0.35	697.80								
		Total					6,740.30								
		Total (20% of total excavation quantity)					**539.22**	**Cum**	**498.90**	**411.40**	**431.97**	**463.45**	**546.87**	**600.57**	**3,23,841.25**
3	2.7.3	**Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge**													
		Hard Rock													
		Column Footing	4,834.00	1.00	1.00	1.25	6,042.50								
		In between Columns	1.00	13,291.50	0.15	0.35	697.80								
		Total					6,740.30								
		Total (10% of total excavation quantity)					**134.81**	**Cum**	**1,432.95**	**1,181.62**	**1,240.71**	**1,331.13**	**1,570.73**	**1,724.97**	**2,32,535.74**
4	4.1.3	**Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :**													
		1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)													
		Below Footings in precast B/W	4,834.00	1.00	1.00	0.10	483.40								
		In between Columns	1.00	13,291.50	0.15	0.15	299.06								
		Total Quantity					**782.46**	**Cum**	**7,878.50**	**6,496.69**	**6,821.52**	**7,318.69**	**8,636.05**	**9,484.03**	**74,20,875.36**
5	5.33.1.1	**RCC Grade M25 using batching plant transit mixer & Concrete pump**													
		All works upto plinth level													
		Concrete of M25 grade with minimum cement content of 330 kg /cum													
		Column footing	4,834.00	0.80	0.80	1.50	4,640.64								
		Total Quantity					**4,640.64**	**Cum**	**9,504.75**	**7,837.71**	**8,229.60**	**8,829.38**	**10,418.67**	**11,441.69**	**5,30,96,761.12**
5	5.9.1	**Centering and shuttering including strutting, propping etc. and removal of form for**													
		Foundations, footings, bases of columns, etc. for mass concrete													
		Column Footing (M-25)	19,336.00	3.20		1.50	92,812.80								
		Total Quantity					**92,812.80**	**Sqm**	**392.15**	**323.37**	**339.54**	**364.29**	**429.86**	**472.06**	**4,38,13,661.33**
6	26.74.1	**Fabrication and manufacturing of solid precast concrete element with provisions of shear keys, connecting loops, dowel tubes and proper lifting accessories for walls, beams, slabs, stairs, column etc, of various thickness, shape and size of different concrete grades manufactured in controlled factory environment with approved methodology including moulds (Pallet system, Tilts form, table moulds, battery moulds, vertical moulds, beam moulds, column moulds, staircase moulds, Facade mould, etc.), mixing, transporting and placing of concrete, vibrating, curing, finishing, making necessary cut-out/ holes of required sizes for services, yard handling & stacking all complete as per IS 11447:1985 and as per approved shop drawings and design mix as per the direction of Engineer-in-Charge (Cost of reinforcement, Mechanical, Electrical and Plumbing inserts will be paid separately).**													
		Concrete grade M-35 (Cement content 370 kgs)													
		Coping -150 mm for columns	4,834.00	0.35	0.35	0.15	86.31								
		For Wall Panels	1.00	14,500.00	0.08	2.40	2,784.00								
		For Wall Panels	1.00	-	0.08	1.20	-								
		For Columns	4,834.00	0.32	0.32	4.25	2,103.76								
		For Columns	1.00	0.32	0.32	3.05	0.31								
		Total					4,974.37								
		Total Quantity					**4,974.37**	**cum**	**20,928.70**	**17,258.02**	**18,120.92**	**19,441.60**	**22,941.09**	**25,193.69**	**12,53,22,818.36**

CAPEX Evaluation for 4th CP

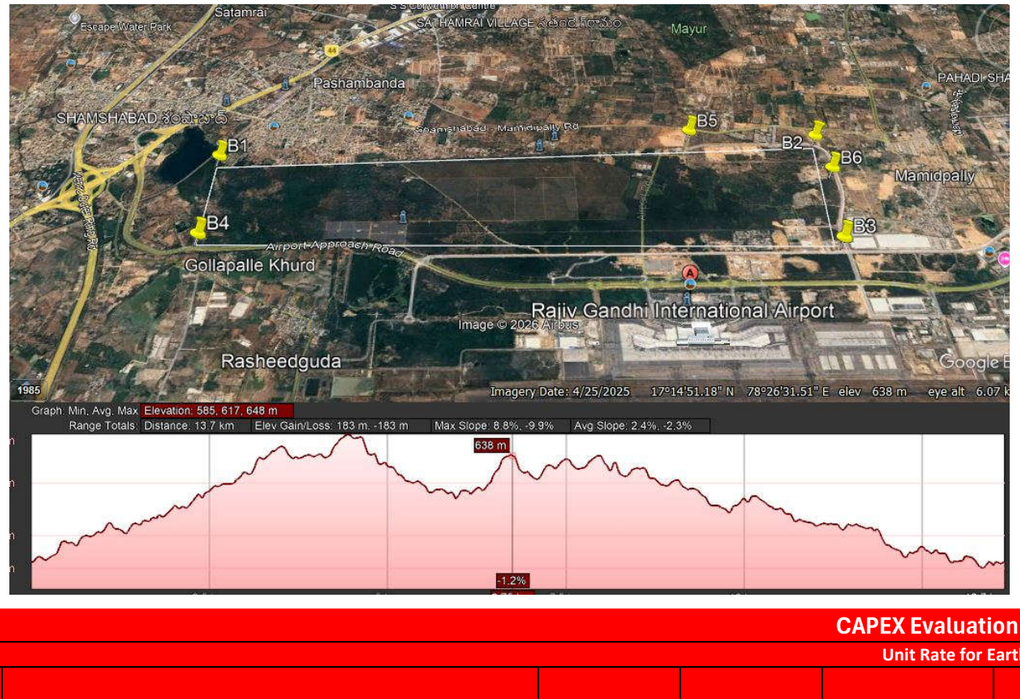
RATE PER RUNNING METER FOR BOUNDARY WALL

		Operational Boundary Wall	14,500.00	METERS											
S. No.	CPWD DSR 2023 ITEM REFERENCE	ITEM DESCRIPTION	Nos	Length	Breadth	Depth	Total Quantity	Unit	Rate (INR)	Rate (INR) w/o GST	Rate (INR) with Cost Index	Rate (INR) with Escalation for 2 Years till 2025	Present Rate (INR) with GST	Rate with Escalation as per RBI Index(INR) with GST	Amount (Rs.)
7	26.76.1	**Transportation of Precast Elements by flat bed Trailer (Double/ Triple axle 40ft Length with proper accessories like A frame etc from factory, including the cost of loading , unloading & stacking at site with the help of required capacity cranes with all leads and lifts involved. (Lead considered is 5 Km)**													
		Lead Within 15 kms													
		Concrete Density = 2500 Kg/cum													
		Total Weight	1.00	12,435.94			12,435.94								
		Total Quantity					**12,435.94**	**Tonne**	**540.85**	**445.99**	**468.29**	**502.42**	**592.86**	**651.07**	**80,96,638.39**
8	26.77.1	**Erection & Installation of Precast/Prestressed Concrete elements in correct & final position with proper line level and plumb at site making all arrangements (i.e. cranes, push-pulljacks & all another T & P for lifting Placing & Alignment of elements, within erection tolerance as per IS 15916 as per approved shop drawings and all complete as per the direction of Engineer-in-Charge but excluding the cost of sim pads, no shrink grout and steel works i.e. hangers. All work up to fifth floor.**													
		Solid concrete wall elements													
		Total Concrete	1.00	4,974.37		2.40	11,938.50								
		Total Quantity					**11,938.50**	**sqm**	**203.50**	**167.81**	**176.20**	**189.04**	**223.07**	**244.97**	**29,24,580.34**
9	5.22.6	**Supplying, Fitting and Placing Uncoated HYSD bar Reinforcement in Foundation and Sub Structure complete as per Drawing and Technical Specifications.**													
		For Wall Panels@110 Kg/Cum	1.00	2,784.00	100.00		2,78,400.00								
		For Columns @ 120 kg/Cum	1.00	2,103.76	120.00		2,52,450.82								
		For Footing @ 50 kg/Cum	1.00	4,640.64	50.00		2,32,032.00								
		Total					**7,62,882.82**	Kg							
		Total Quantity					**7,62,882.82**	**Kg**	**107.85**	**88.93**	**93.38**	**100.19**	**118.22**	**129.83**	**9,90,43,831.97**
10	10.2	**Providing and fixing structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete as per drawings and directions of Engineer-in-charge.**													
		MS Angle - 50*50*6 (wall column)	4,834.00	2.00	@	4.50	43,506.00								
		Total Quantity					**43,506.00**	**Kg**	**133.70**	**110.25**	**115.76**	**124.20**	**146.56**	**160.95**	**70,02,127.52**
11	16.53	**Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately)**													
		For Concertina Overhang.	1.00	14,500.00			14,500.00								
		all gates Gate	1.00	17.50			17.50								
		Total					14,517.50	**m**							
		Total Quantity					**14,517.50**	**m**	**375.80**	**309.89**	**325.38**	**349.10**	**411.93**	**452.38**	**65,67,469.48**
12	26.35.1	**Providing and injecting approved grout in proportion recommended by the manufacturer into joining area of pre cast concrete members / masonry by suitable gun/ pump at required pressure including cutting of nipples after curing etc. complete as per directions of Engineer-in-Charge.(The payment shall be made on the basis of actual weight of approved grout injected.)Stirrer mixed Acrylic Polymer of approved make @ 2% of weight of cement used) modified Cement slurry made with non shrink compound in concrete/RCC work**													
		For Filling in column wall space (Density - 2200kg/m3)	4,834.00	0.01			56,151.74								
		Total					56,151.74								
		Total Quantity					**56,151.74**	**Kg**	**119.30**	**98.38**	**103.29**	**110.82**	**130.77**	**143.61**	**80,64,048.77**
13	13.48.A.1	**Finishing walls with 100% Premium acrylic emulsion paint having VOC less than 50 gm/litre and UV resistance as per IS 15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade (Company Depot Tinted) with silicon additives**													
		New work (Two or more coats applied @ 1.43 litre/ 10 sqm. Over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm.													
		Length of Boundary Wall (external & Internal), both side	2.00	14,500.00		2.40	69,600.00								
		Side face of column	4,834.00	0.44		2.40	5,104.70								
		Total					**74,704.70**	**sqm**	**181.25**	**149.46**	**156.93**	**168.37**	**198.68**	**218.19**	**1,62,99,542.60**
14	13.61.1	**Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :**													
		Two or more coats on new work													
		50X50X6 angle for concertina coil at column	4,834.00	1.00	0.20	1.80	1,740.24								
		Total					**1,740.24**	**sqm**	**155.90**	**128.56**	**134.98**	**144.82**	**170.89**	**187.67**	**3,26,591.38**
														TOTAL	**37,95,43,473.43**
														UNIT RATE PER /RUNNING METER	**26,175.41**

ANNEXURE-9
Unit Rate Calculation for Earthworks

EARTHWORK QUANTITY CALCULATION

S.No	Parameter	Value (ft)	Value (meters)	Reference Document
1	Existing Threshold 09R	1971 Ft	600.76	AIP
2	Existing Threshold 27 R	2026 Ft	617.52	AIP
3	Distance Between Existing Runway and New Runway		2150	GHIAL Masterplan
4	Maximum Permissble Threshold Level at 09 End on New Runway		600.76	
5	Maximum Permissble Threshold Level at 27 End on New Runway		617.52	
6	Average Gradation Levels		609.14	
7	Earthwork Volume in Cut Worked out from Google Earth OGL's		1,00,07,715.92	
8	Earthwork Volume in Fill Worked out from Google Earth OGL's		1,21,20,376.41	



CAPEX Evaluation for 4th CP

Unit Rate for Earthworks

S. No.	CPWD DSR ITEM REFERENCE	ITEM DESCRIPTION	Nos	Quantity in SQM	Layer Depth	Total Quantity	Unit	Rate (INR)	Rate (INR) w/o GST	Rate (INR) with Cost Index	Rate (INR) with Escalation for 2 Years till 2025	Present Rate (INR) with GST	Rate with Escalation as per RBI Index(INR) with GST	Amount (Rs.)
1	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.												
		Total area (in hectares)	1	25,84,000.00		25,84,000.00								
		Less Paved Area	-1	3,92,200.00		-3,92,200.00								
		Total Quantity				**21,91,800.00**	**sqm**	**17.60**	**14.51**	**15.24**	**16.35**	**19.29**	**21.19**	**4,64,36,881.12**
2	2.26	**Earth work Excavation (In all Kinds of Soil)**												
		Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge												
	2.26.1	All kinds of soil												
		In all kinds of soil (As per MX Summary Sheet) -70% of total quantity	1.00	1,00,07,715.92	0.7	70,05,401.14								
		Total Quantity				**70,05,401.14**	**cum**	**177.50**	**146.37**	**153.69**	**164.89**	**194.57**	**213.67**	**1,49,68,58,745.60**
3	2.27	**Earth work Excavation (In Ordinary Rock)**												

CAPEX Evaluation for 4th CP

Unit Rate for Earthworks

S. No.	CPWD DSR ITEM REFERENCE	ITEM DESCRIPTION	Nos	Quantity in SQM	Layer Depth	Total Quantity	Unit	Rate (INR)	Rate (INR) w/o GST	Rate (INR) with Cost Index	Rate (INR) with Escalation for 2 Years till 2025	Present Rate (INR) with GST	Rate with Escalation as per RBI Index(INR) with GST	Amount (Rs.)
		Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge												
	2.27.1	Ordinary rock												
		Ordinary rock (As per MX Summary Sheet) - 20% of total quantity	1.00	1,00,07,715.92	0.2	20,01,543.18								
		Total Quantity				**20,01,543.18**	**cum**	**498.90**	**411.40**	**431.97**	**463.45**	**546.87**	**600.57**	**1,20,20,64,914.58**
4	**2.27**	**Earth work Excavation (Hard Rock)**												
		Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge												
	2.27.2	Hard rock (requiring blasting)												
		Hard rock (blasting allowed) (As per MX Summary Sheet) -10% of total quantity	0.10	1,00,07,715.92	0.1	1,00,077.16								
		Total Quantity				**1,00,077.16**	**cum**	**874.40**	**721.04**	**757.09**	**812.27**	**958.48**	**1,052.59**	**10,53,40,304.80**
5	**2.25**	**Filling using Excavated Earth**												
		Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lift												
		Total Quantity	1	1,21,20,376.41		1,21,20,376.41								
						1,21,20,376.41	**cum**	**196.00**	**161.62**	**169.70**	**182.07**	**214.85**	**235.94**	**2,85,97,07,613.45**
6	**2.25 (a)**	**Filling using Borrow Earth**												
		Excavating, supplying, stacking and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in foundation trenches, plinth, sides of foundation etc. complete for all lift.												
		Total Quantity	1	21,12,660.49		21,12,660.49								
						21,12,660.49	**cum**	**700.50**	**577.64**	**606.52**	**650.73**	**767.86**	**843.25**	**1,78,15,06,055.15**
TOTAL COST OF EARTHWORK														**7,49,19,14,514.70**
UNIT RATE OF EARTHWORK														**677.14**

ANNEXURE-10
CAPEX Evaluation for External Utilities based on GHIAL Submission

Note on Cost of utilities
Project : Development of Northen Present at RGIAL, Shamshabad

This note is prepared to derive the cost estimate for Utility works for development of Northen Present at RGIAL.

Ref : Most recent EPC contract signed with M/s L&T Limited for development of IT&C works at Bhogapu Airport is considered

The Overall EPC Contract value is Rs. 3668 Crores and work was scheduled to be competed by April 2026.

	As per L&T EPC Contract		
3.7.1	Site wide Plumbing, Sewage And Fire Protection		64,98,75,675
3.8.1	Site Wide - Electrical		61,21,61,765
3.5.1	Fuel Hydrant System		48,43,31,267
3.6.1	Site wide Storm Water Management		1,25,79,56,286
	Sub Total		**3,00,43,24,993**
1.1	Contractors Over hed as per Cost centre 1	10.26%	30,82,43,744
	TOTAL		**3,31,25,68,737**
	GST		**59,62,62,373**
	Grand Total		**3,90,88,31,110**

Total development area of Bhopgapuramm (B^1)	Sqm	70,000
Rate per Sqm (Completion year April 2026)	**Per Sqm**	55,840
Escalation	3%	
Present Price×(1+r)^n		
Add Escalation of 3 % YoY for 4 years for completion year Dec 2029		**62,849**
Cost for North Presant Cost		
Proposed CP 4 Development area H^1	Sqm	65,000
Proportionate Base cost for RGIAL- Northen present development		**4,08,51,79,290**
Say 408.51 Cores		

(B^1) Area measured - approx. develop area for Phase 1 of Bhogapuram airport incl Airside, forecourt and terminal. Excl commercial land development

(H^1) Area measured - approx. develop area for CP4 Development of Hyderabad incl Airside, forecourt and terminal. Excl commercial land development

Query : The rate per sqm. for external utilities adopted based on Bhogapuram rates duly inflated is inappropriate since requirements are different. Proper justification be given and modify the estimate accordingly

Justification :

Bhogapuram Airport is of 6 MPPA capacity with overall development area of approximately 1730 Acres. The Northen precent also has similar area. However, the terminal area is significantly larger at 225,000 sqm Vs 70,000 Sqm at Bhogapuram. Hence the overall power , water, fuel, storm, water , drainage and other utility requirements shall be higher.

The cost head of External utilities proposed for the northern precinct development included following heads which are similar to the cost centers mentioned in the EPC contract of L&T for development of Bhogapuram Airport.

- Site wide Plumbing, Sewage And Fire Protection :
- Site Wide - Electrical
- Fuel Hydrant System
- Site wide Storm Water Management

The total cost of above work as per EPC contract is Rs. 390.88 Cr incl Contractor's over head and GST.

Though the northern precinct development is a brown filed development to the extent of elevated taxiway, the project is green field in nature for the majority of the works like Bhogapuram.

The HT Power from the state distribution company is required to be brought for the overall power demand. The substation including meeting bay, the substation, DG yard , the power destruction system including RMUs , substations for terminal, airside, AGL , Nav aids, other buildings are to be provided based on the demand.

The Fuel hydrant line to be established from the out let of the fuel tanking system (not part of the cost and to be provided by the fuel company) which is similar to Bhogapuram.

The external fire hydrant lines for airside and land side are similar . Since the number of remote and contact stands at RGIA are higher the fire hydrant cost shall be higher compared to Bhogapuram.

The water to be drawn from the municipal supply in both cases. The piping and pumping cost would be similar considering the distance from source to terminal is similar. However, the cost at

RGIA for tanks should be higher based on the terminal size and water demand. The tanking cost is part of the terminal building. Hence, the cost at Bhogapuram is used.

The storm water system / overall surface drainage system is though designed based on the multiple design factors, the overall developmental area is similar. Following design criteria are closely similar at both locations except of more paved area at RGIA requiring higher apron drainage , culverts, larger oil water separator and longer and larger length of drains.

- The Hydrological Design factors / inputs
- Drainage System Planning for surface and subsurface drain
- Hydraulic Design Criteria
- The safety factors
- Flooding & Ponding Criteria
- Erosion & Silt Control
- O&M philosophy
- Environmental criteria and EC regulations

Hence, considering Bogapuram rates duly inflated for Northern Precinct development is appropriate.

ANNEXURE-11
CAPEX Evaluation for Landscaping based on GHIAL Submission

Note on Cost of LANDSCAPE
Project : Development of Northern Precinct at GHIAL, Shamshad

This note is prepared to derive the cost estimate for Landscape works for development of Northen Present at GHIAL.

Ref : Most recent EPC contract signed with M/s L&T Limited for development of Landscape works at Bhogapuram Airport is considered
The Overall EPC Contract value is Rs. 3668 Crores and work was scheduled to be competed by April 2026.

	As per L&T EPC Contract for Bhogapuram		
2.13.1	Passenger Terminal Building -Landscape		36,47,26,571
2.13.2	ATC & TCTB, All Ancillary Buildings - Landscape		14,35,14,481
	Sub Total		**50,82,41,052**
1.1	Contractors Over head as per Cost centre 1	10.26%	5,21,45,532
	TOTAL		**56,03,86,584**
	GST		**10,08,69,585**
	Grand Total		**66,12,56,169**
	Terminal Area	SQM	66,500
	Capacity		6 MPPA
	Total development area of Bhogapuram (B^1)	**Sqm**	**70,00,000**
	Rate per Sqm (Completion year April 2026)	**Per Sqm**	94.47
	Escalation	3%	
	Present Price×(1+r)^n		
	Add Escalation of 3% YoY for 4 years for completion year Dec 2029		**106**
	Cost for North Present Cost		
	Proposed CP 4 Development area H^1	Sqm	65,00,000
	Proportionate Base cost for RGIAL- Northen present development		**69,11,24,312**

(B^1) Area measured - approx. develop area for Phase 1 of Bhogapuram airport incl Airside, forecourt and terminal. Excl commercial land development

(H^1) Area measured - approx. develop area for CP4 Development of Hyderabad incl Airside, forecourt and terminal. Excl commercial land development

Landscape areas include but not limited

PTB all areas, Fore court, arrival and departure ramps, Car park, approach roads, AAI technical Block, PTC buildings and other key builds shall be covered

ANNEXURE-12
Unit Rate Calculation for Car Parking

CAPEX Evaluation for 4th CP

RATE FOR CAR PARKING

S. No.	CPWD DSR ITEM REFERENCE	ITEM DESCRIPTION	Nos	Quantity in SQM	Layer Depth	Total Quantity	Unit	Rate (INR)	Rate (INR) w/o GST	Rate (INR) with Cost Index	Rate (INR) with Escalation for 2 Years till 2025	Present Rate (INR) with GST	Rate with Escalation as per RBI Index(INR) with GST	Amount (Rs.)
1		**Granular Sub Base**												
	16.78	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineerin-Charge.												
	16.78.1	With material conforming to Grade-I (size range 75 mm to 0.075 mm) having CBR Value-30												
		Roads												
	1	Main Carraigeway	1	1,00,000.00	0.30	30,000.00								
		Total Quantity				**30,000.00**	**Cum**	**2,784.00**	**2,295.71**	**2,410.50**	**2,586.18**	**3,051.69**	**3,351.34**	**10,05,40,244.82**
2		**WET MIX MACADAM**												
	16.79	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paver finisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achievethe desired density, complete as per specifications and directions of Engineer-in-Charge.												
		Airside Pavements												
	1	Main Carraigeway	1	1,00,000.00	0.25	25,000.00								
		Total Quantity				**25,000.00**	**cum**	**2,914.30**	**2,403.16**	**2,523.32**	**2,707.22**	**3,194.52**	**3,508.19**	**8,77,04,871.73**
3		**DRY LEAN CONCRETE**												
	16.79	Construction of dry lean cement concrete sub base over a prepared subgrade with coarse and fine aggregate conforming to IS:383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per specifications, cement content not to be less than 150 Kg/cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, for all leads & lifts, laid with a mechanical paver, compacting with 8-10 tonne vibratory roller, finishing and curing etc. complete as per direction of Engineer-in- charge.												
		Airside Pavements												
	1	Main Carraigeway	1	1,00,000.00	0.15	15,000.00								
		Total Quantity				**15,000.00**	**cum**	**4,148.65**	**3,421.02**	**3,592.07**	**3,853.87**	**4,547.56**	**4,994.09**	**7,49,11,330.22**
4		**Cement Concrete Pavement**												
	16.43	Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/ expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineerin-charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately). Note:- Cement content considered in M-30 is @ 340 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately												
	16.43.2	Cement concrete manufactured in automatic batching plant (RMC plant) including transportation to site in transit mixer												
		Airside Pavements												
	1	Main Carraigeway	1	1,00,000.00	0.40	40,000.00								
		Total Quantity				**40,000.00**	**Cum**	**11,098.45**	**9,151.89**	**9,609.49**	**10,309.84**	**12,165.61**	**13,360.16**	**53,44,06,551.80**
5		Road Markings												
	16.48	Painting road surface marking with adequate nos of coats to give uniform finish with ready mixed road marking paint conforming to IS : 164, on bituminous surface in white/yellow shade, including cleaning the surface of all dirt, scales, oil, grease and foreign material etc. complete.												
	16.48.1	New work (Two or more coats)												
		10% of Surface Area of Roads	1	1,00,000.00	0.20	20,000.00								
		Total Quantity				**20,000.00**	**Sqm**	**288.90**	**238.23**	**250.14**	**268.37**	**316.68**	**347.77**	**69,55,478.14**

CAPEX Evaluation for 4th CP

RATE FOR CAR PARKING

S. No.	CPWD DSR ITEM REFERENCE	ITEM DESCRIPTION	Nos	Quantity in SQM	Layer Depth	Total Quantity	Unit	Rate (INR)	Rate (INR) w/o GST	Rate (INR) with Cost Index	Rate (INR) with Escalation for 2 Years till 2025	Present Rate (INR) with GST	Rate with Escalation as per RBI Index(INR) with GST	Amount (Rs.)
6	2.25 (a)	Excavating, supplying, stacking and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in foundation trenches, plinth, sides of foundation etc. complete for all lift.												
	1	Main Carraigeway	1	1,00,000.00	0.50	50,000.00								
		Total Quantity				**50,000.00**	**cum**	**700.50**	**577.64**	**606.52**	**650.73**	**767.86**	**843.25**	**4,21,62,620.63**
7	16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earthwith lead upto 50 metres.												
	1	Main Carraigeway	1	1,00,000.00		1,00,000.00								
		Total Quantity				**1,00,000.00**	**sqm**	**218.90**	**180.51**	**189.53**	**203.35**	**239.95**	**263.51**	**2,63,50,885.53**
8	5.35	Add for using extra cement in the items of design mix over and above the specified cement content therein	1			**24,000.00**	**Quintal**	**733.50**	**604.85**	**635.09**	**681.38**	**804.03**	**882.98**	**2,11,91,456.78**
9	16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5 mm), including making drainage opening wherever required complete etc. as per direction of Engineerin-charge (length of finished kerb edging shall be measured to calculate volume for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	1	**0.15**	**4,000.00**	**600.00**	**cum**	**10,117.60**	**8,343.07**	**8,760.23**	**9,398.69**	**11,090.45**	**12,179.43**	**73,07,657.91**

CAPEX Evaluation for 4th CP

RATE FOR CAR PARKING

S. No.	CPWD DSR ITEM REFERENCE	ITEM DESCRIPTION	Nos	Quantity in SQM	Layer Depth	Total Quantity	Unit	Rate (INR)	Rate (INR) w/o GST	Rate (INR) with Cost Index	Rate (INR) with Escalation for 2 Years till 2025	Present Rate (INR) with GST	Rate with Escalation as per RBI Index(INR) with GST	Amount (Rs.)
10	16.50	Providing and fixing Glow studs of size 100x20 mm made of heavy duty body shall be moulded ASA (Acrylic styrene Acryloretrite) or HIP (High impact polystyrene) or ABS having electronically welded micro- prismatic lens with abrasion resistant coating as approved by Engineer in charge. The glow stud shall support a load of 13635 kg tested in accordance with ASTM D4280. The slope of retro- reflective surface shall be 35 (+/- 5) degress to base .The reflective panels on both sides with at least 12 cm of reflective area up each side. The luminance intensity should be as per the specification and shall be tested as described in ASTM I: 809 as recommended in BS: 873 part 4 : 1973. The studs shall be fixed to the Road surface using the adhesive conforming to IS, as per procedure recommended by the manufacturer complete and as per direction of Engineer-in-charge.	1		**20,000.00**	**20,000.00**	**each**	**206.30**	**170.12**	**178.62**	**191.64**	**226.14**	**248.34**	**49,66,822.92**
11	16.59	Manufacturing, supplying and fixing retro reflective sign boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type - IV of ASTM-D 4956-01 in blue and silver white or other colour combination including subject matter, message (bi-lingual), symbols and borders etc. as per IRC ; 67:2001, pasted on substrate by an adhesive backing which shall be activated by applying heat and pressure conforming to class -2 of ASTM-D-4956-01 and fixing the same with suitable sized aluminium alloy rivets @ 20 cm c/c to back support frame of M.S. angle iron of size 25x25x3 mm along with theft resistant measures, mounted and fixed with 2 Nos. M.S. angles of size 35x35x5 mm to a vertical post made up to M.S. Tee section ISMT 50x50x6 mm	1		**4,000.00**	**4,000.00**	**each**	**7,183.35**	**5,923.46**	**6,219.64**	**6,672.93**	**7,874.06**	**8,647.22**	**3,45,88,877.76**
TOTAL COST OF CAR PARKING														**94,10,86,798.24**
UNIT RATE PER SQM														**9,410.87**

ANNEXURE-13
CAPEX Evaluation for IT Works based on GHIAL Submission

Note on Cost of IT Works
Project : Development of Northen Present at RGIAL, Shamshad

This note is prepared to derive the cost estimate for IT &C works for development of Northen Present at RGIAL.

Ref : Most recent IT&C- DBFOT contract signed with M/s WASIL Limited for development of IT&C works at Bhogapuram Airport is considered

The Overall CAPEX investment by WASIL limited under DBFOT contract is Rs. 141.42 Crores and work was scheduled to be competed by April 2026.

Terminal Area	SQM		66,500
Capacity			6 MPPA
Cost of WAISL	INR		1,41,42,00,000
Cost per MPPA	INR		**23,57,00,000**
Cost per Sqm	INR		21,266
Year of Capex incurred			2025-2026
GHIAL - North side development timelines			2026-2030
Escalation	3%		for 4 Years
Present Price×(1+r)^n		**23,935**	**Per Sqm**

Proposed cost for GHIAL

	Terminal Area	Escalated Rate Per Sqm	Cost
Northen present - IT Development cost	226568.00	23935.26	**5,42,29,63,201**
Additional cost for Control centre office block for AAI on North side	3000.00	23935.26	**7,18,05,770**
IT&C works for expansion of AOCC / APOC , Augmentation and modification of existing IT&C system			**19,00,00,000**
TOTAL			**6,35,34,51,733**
		Say	**635.34 Crores**

ANNEXURE-14
CAPEX Evaluation for Operational Equipment's based on GHIAL Submission

Note on Cost of Operational Equipments

Project : Development of Northern Precinct at GHIAL, Shamshad

S.No	Item Description	Unit	Qty	Unit Price	Amount
1	Follow me Vehicles	Nos	2	22,50,000	45,00,000
2	Friction Tester	Nos	1	2,00,00,000	2,00,00,000
3	Rubber Removal	Nos	1	6,10,00,000	6,10,00,000
4	Runway Sweeper	Nos	1	4,00,00,000	4,00,00,000
5	Apron Sweeper	Nos	2	2,75,00,000	5,50,00,000
6	Pavement Marker	Nos	1	50,00,000	50,00,000
7	CFT with ancillary equipment (Forcible entry tools, Ladder etc.)	Nos	5	11,50,00,000	57,50,00,000
8	Domestic Fire Tender/ Water bouser	Nos	2	1,20,00,000	2,40,00,000
9	Ambulance	Nos	1	30,00,000	30,00,000
10	Trolly retrieval vahicles -EV	Nos	4	9,50,000	38,00,000
11	Baggies / Golf carts - EV	Nos	4	15,00,000	60,00,000
12	36 Mtrs - High reach platforms	Nos	1	1,50,00,000	1,50,00,000
13	25 Mtrs High reach platforms	Nos	1	1,10,00,000	1,10,00,000
14	12-16 Mtrs platform	Nos	1	66,50,000	66,50,000
15	Baggage Trolleys	Nos	2000	25,000	5,00,00,000
16	Baggage Trays	Nos	900	4,500	40,50,000
17	OOG Trolleys	Nos	50	40,000	20,00,000
	Total				**88,60,00,000**
					88.60

ANNEXURE-15
Unit Rate Calculation for Underpass

Project Cost Analysis - UNDERPASS

Sl. No.	Description	Input	Output		
			Total Cost (Cr.)	Total Cost (Rupees)	Cost Per Unit (Cr.)
1	Name of State	Telangana			
	Aggregate Lead in km	20			
2	Flexible Pavement				
(a)	Type-1				
	Configuration of Road with Pavement Combination	Greenfield Alignment - 2 Lane+ PS_ (BC, DBM, WMM & GSB)	2.320	2,32,00,000	2.320
	Length in Km	1			
	Embankment Height in meter	0			
	MSA	0			
	Aggregate Lead in km	20			
6	RE Wall Structure Approach (Flyovers/VUP/LVUP/SVUP/ROB)				
(i)	Flexible Pavement				
	Type-1				
	Configuration of Road with Pavement Combination	For 4-lane Greenfield Alignment _(BC, DBM, WMM & GSB)	32.0595	32,05,95,000	0.002
	Area in Sqm	16500.00			
	MSA	50.00			
	Aggregate Lead in km	50			
7	Flyover/ VUP				
	Structure No-1				
	Structure Configuration	Multiple Span With Pile Foundation	59.570	59,57,00,738	0.004
	Skew Angle in degree	0.00			
	Aggregate Lead in km.	20			
	Area in Sqm.	16500.00			
13	New Jersey Crash Barrier		0.919	91,92,000	0.0002
	Length in meter	4000.00			
	Aggregate Lead in km	20			
14	Metal Beam Crash Barrier (meter)	0.00	0.000	0	0.0000
15	Lined Covered Drain		1.283	1,28,34,050	0.0006
	Length in meter	2000.00			
	Aggregate Lead in km	20			
16	Retaining Wall		8.670	8,67,02,300	0.0043
	Length in meter	2000.00			
	Aggregate Lead in km	20			
17	Toe Wall		4.590	4,59,02,150	0.0023
	Length in meter	2000.00			
	Aggregate Lead in km	20			
18	Boundary Wall				
	(i) 1.8 meter High GI Barbed Wire Fencing in meter	0.00	0.000	0	0.0000
	(ii) RCC type in meter	2000.00	1.046	1,04,56,000	0.0005
19	The provision of various miscellaneous items such as Toll Plaza, Rest Area, Bus bays, Truck lay-byes, ATMS, Foot over bridge, Road & Traffic signage, Wayside amenities, ambulance, crane and other project facilities. Cost of these items may be worked out as per site requirement in each case or lump-sum provision @ 10% to 15% of Total Project Cost. (Amount in Crore)	0.00	0.000	0	0.0%
	Total Project Cost		110.458	1,10,45,82,238	
	UNIT COST PER SQM FOR UNDEPASS			78,899	

Note:-

1 Length of main carriageway will be excluding RE Wall Approach length.
2 Average Height of Embankment for main carriageway will be excluding RE Wall Approach.
3 RE Wall Cost is inclusive of Pavement Crust DBM/BC etc.
4 Barrel length of Hume Pipe Culvert & Box Culvert.

5 Drop-down seletion & Manual entry are required from Input (D column) as below :

(a) Select from drop-down list — X Type

(b) Manual entry — 0.00

6 Abbreviations :

BC, DBM, WMM & GSB - Surface course, Base/Binder course, WMM & GSB

BC, DBM, AIL, CTB & CTSB - Surface course, Base/Binder course, AIL, CTB & CTSB

BC, DBM, CTB, CTSB & SAMI - Surface course, Base/Binder course, CTB, CTSB & SAMI

BC, DBM, AIL, CTB & GSB - Surface course, Base/Binder course, AIL, CTB & GSB

BC, DBM, WMM, & CTSB - Surface course, Base/Binder course, WMM, & CTSB)

PS - Paved Shoulder

ANNEXURE-16
Unit Rate Calculation for Terminal Building

Terminal Building - Normative Rate Evaluation for 4th CP				
S.No	**Parameter**	**Value**	**Unit**	**Remarks**
1	Terminal Building Unit Rate (FY 21)	1,29,813.96	Rs/Sqm	As per CP-2
2	WPI based inflation for FY 22	7.14	Percentage	
3	WPI based inflation for FY 23	9.40	Percentage	As per Chapter 5 para 5.1 (H)
4	WPI based inflation for FY 24	-0.72	Percentage	As per Chapter 5 para 5.1 (H)
5	WPI based inflation for FY 25	2.31	Percentage	As per Chapter 5 para 5.1 (H)
6	WPI based inflation for FY 26	0.90	Percentage	As per Chapter 5 para 5.1 (I)
7	WPI based inflation FY 27	4.70	Percentage	As per Chapter 5 para 5.1 (I)
8	WPI based inflation FY 28	3.60	Percentage	As per Chapter 5 para 5.1 (I)
9	WPI based inflation FY 29	3.60	Percentage	As per Chapter 5 para 5.1 (I)
10	WPI based inflation FY 30	3.60	Percentage	As per Chapter 5 para 5.1 (I)
11	Unit Rate for FY 22	1,39,082.68	Rs/Sqm	
12	Unit Rate for FY 23	1,52,156.45	Rs/Sqm	
13	Unit Rate for FY 24	1,51,060.92	Rs/Sqm	
14	Unit Rate for FY 25	1,54,550.43	Rs/Sqm	
15	Unit Rate for FY 26	1,55,941.38	Rs/Sqm	
16	Unit Rate for FY 27	1,63,270.63	Rs/Sqm	
17	Unit Rate for FY 28	1,69,148.37	Rs/Sqm	
18	Unit Rate for FY 29	1,75,237.71	Rs/Sqm	
19	Unit Rate for FY 30	1,81,546.27	Rs/Sqm	
Unit Rate for CP-4		**1,81,546.27**		

ANNEXURE-17
Submission by GHIAL - Airport systems and ops equipment

ANNEXURE-17

S.No	Item Description	Unit	Qty	Unit Price	Amount	Remarks
1	Follow me Vehicles	Nos	2	22,50,000	45,00,000	Electric car- Hynd Cona, BE 9 or equivalent
2	Friction Tester	Nos	1	2,00,00,000	2,00,00,000	
3	Rubber Removal	Nos	1	6,10,00,000	6,10,00,000	
4	Runway Sweeper	Nos	1	4,00,00,000	4,00,00,000	
5	Apron Sweeper	Nos	2	2,75,00,000	5,50,00,000	
6	Pavement Marker	Nos	1	50,00,000	50,00,000	
7	CFT with ancillary equipment (Forcible entry tools, Ladder etc.)	Nos	5	11,50,00,000	57,50,00,000	Rosenbauer or Oshkosh
8	Domestic Fire Tender/ Water bouser	Nos	2	1,20,00,000	2,40,00,000	
9	Ambulance	Nos	1	30,00,000	30,00,000	
10	Trolly retrieval vahicles -EV	Nos	4	9,50,000	38,00,000	
11	Baggies / Golf carts - EV	Nos	4	15,00,000	60,00,000	at Arrival, departure levels + VVIP
12	36 Mtrs - High reach platforms	Nos	1	1,50,00,000	1,50,00,000	MEP maintenance, Celling cleaning , façade cleaning at various levels
13	25 Mtrs High reach platforms	Nos	1	1,10,00,000	1,10,00,000	MEP maintenance, Celling cleaning , façade cleaning at various levels
14	12-16 Mtrs platform	Nos	1	66,50,000	66,50,000	MEP maintenance, Celling cleaning , façade cleaning at various levels
15	Baggage Trolleys	Nos	2000	25,000	5,00,00,000	
16	Baggage Trays	Nos	900	4,500	40,50,000	
17	OOG Trolleys	Nos	50	40,000	20,00,000	
	Total				**88,60,00,000**	
					88.60	

GHIAL NORTHERN DEVELOPMENT
PASSENGER TERMINAL BUILDING
Package: Elevator & Escalator Works

SL NO	Elevators	Qty	No of Stop	Specification	Rate	Amount
1	PE-PTB-Z2-LI-01	6	2	Glass MPS-1 Floor: granite tiles, Glass doors, buffer rails and handrails along the glazed sides	66,55,000.00	3,99,30,000
2	PE-PTB-Z3-LI-01	3	2	SS MPS-1 Floor: granite tiles, Glass doors, buffer rails and handrails along the glazed sides	42,35,000.00	1,27,05,000
3	PE-PTB-Z3-LI-01	6	2	SS MPS-1 Floor: granite tiles, Glass doors, buffer rails and handrails along the glazed sides	42,35,000.00	2,54,10,000
4	PE-PTB-Z4-LI-03	3	2	Glass MPS-1 Floor: granite tiles, Glass doors, buffer rails and handrails along the glazed sides	66,55,000.00	1,99,65,000
5	PE-PTB-Z5-LI-01	3	2	Glass MPS-1 Floor: granite tiles, Glass doors, buffer rails and handrails along the glazed sides	66,55,000.00	1,99,65,000
6	PE-PTB-Z5-LI-02	3	2	Glass MPS-1 Floor: granite tiles, Glass doors, buffer rails and handrails along the glazed sides	66,55,000.00	1,99,65,000
7	ood & Staff PTB-Z4-LI-0	3	3	SS MPS-1 Floor: Heavy Duty Vinyl, Stainless steel doors, buffer rails and handrails along the glazed sides	46,58,500.00	1,39,75,500
8	Refuse-PTB-Z4-LI-02	3	3	SS MPS-1 Heavy Duty Viny, Stainless-steel doors, buffer rails and handrails along the glazed sides	46,58,500.00	1,39,75,500

Total Amount	30		**16,58,91,000.00**

SL NO	Escalator	Qty	Meter	Specification	Rate	Amount
1	PTB-Z2-ES-01/02	6	7	30 deg to horizontal Step Width: 1000 mm Nominal Speed: 0.5 mps	1,57,30,000.00	9,43,80,000
2	PTB-Z3-ES-01	3	7	30 deg to horizontal Step Width: 1000 mm Nominal Speed: 0.5 mps	1,57,30,000.00	4,71,90,000
3	PTB-Z3-ES-02/03	6	7	30 deg to horizontal Step Width: 1000 mm Nominal Speed: 0.5 mps	1,57,30,000.00	9,43,80,000
4	PTB-Z4-ES-01	3	6	30 deg to horizontal Step Width: 1000 mm Nominal Speed: 0.5 mps	1,33,10,000.00	3,99,30,000
5	PTB-Z4-ES-02	3	6	30 deg to horizontal Step Width: 1000 mm Nominal Speed: 0.5 mps	1,33,10,000.00	3,99,30,000
6	PTB-Z5-ES-01	3	7	30 deg to horizontal Step Width: 1000 mm Nominal Speed: 0.5 mps	1,33,10,000.00	3,99,30,000
7	PTB-Z5-ES-02	3	7	30 deg to horizontal Step Width: 1000 mm Nominal Speed: 0.5 mps	1,33,10,000.00	3,99,30,000
Total Amount		27				**39,56,70,000**

56,15,61,000.00

GHIAL NORTHERN DEVELOPMENT						
APRON						
GPU & PCA						
Sr. No.	**Item Description**	**Unit**	**Qty**	**Rate**	**Amount**	**Remarks**
1	**GPU**					
1.00	Fixed Grouns Mounted GPUs incl Pit / pit covers and converters	Nos	33	55,60,000.00	18,34,80,000.00	
1.10	Bridge Mounted GPU for contact stands including for MARS stand	Nos	28	65,00,000.00	18,20,00,000.00	
2.00	VDC - mobile GPUs	Nos	3	30,55,360.00	**91,66,080.00**	
3.00	Supply and installation of bridge mounted PCA for contact stands, including all accessories lihe control panel, cable trays, control cables etc. ITW GSE 3500 PCA 210 for bridge or mobile mounting	Nos	24	2,31,00,000.00	55,44,00,000.00	
	Sub Total				**92,90,46,080.00**	
	VDGS - Bridge mounted under PTB cost	Nos	28	9100000	25,48,00,000.00	
	VDGS - Remote stands- pole mounted	Nos	33	9380000	30,95,40,000.00	
	Sub Total				**56,43,40,000.00**	
	TOTAL				**1,49,33,86,080.00**	

	SECTION 11 -PASSENGER BOARDING BRIDGE	**Nos**	**24**	**3,90,00,000**	**93,60,00,000**
					93,60,00,000

Sl. No.	Sytem Description	UOM	Qty	Rate	Amount
1	XHBS- Passenger	Nos	16	60,00,000	9,60,00,000
2	ATRS	Nos	16	1,45,00,000	23,20,00,000
2	DFMDs	Nos	64	4,50,000	2,88,00,000
3	ETDS	Nos	16	3,50,00,000	56,00,00,000
4	Random Gate screeing Machine	Nos	4	1,20,00,000	4,80,00,000
5	Arrival Baggage Screening Machine	Nos	10	1,20,00,000	12,00,00,000
6	Custom Screening Machine - In line	Nos	4	2,10,00,000	8,40,00,000
7	Customs Red channel	Nos	4	1,20,00,000	4,80,00,000
7	Staff Screening Machine	Nos	7	4,00,000	28,00,000
8	Goods Screening Machine	Nos	4	1,80,00,000	7,20,00,000
9	HHMD	Nos	128	50,000	64,00,000
10	**Radiological Detection Equipment (RDE)**				
10.1	RDE Limp Monitor / Detector @ all entry and	Nos	20	1,20,00,000	24,00,00,000
10.2	RED Special Nuclear Material detector - Vahicles		4	2,10,00,000	8,40,00,000
10.3	RDE- Vibrating Sample Magnetometer (VSM) systems		6	1,55,60,000	9,33,60,000
11	QRT Equipment , Tools, Command Vahicles	Set	2	3,00,00,000	6,00,00,000
12	Airside Gates - screening - XHBS	Nos	4	60,00,000	2,40,00,000
13	Airside Gates - DFMD	Nos	8	4,50,000	36,00,000
14	Airisde gate HHMD	Nos	36	50,000	18,00,000
					1,80,47,60,000

Sl. No.	Sytem Description	UOM	Qty	Rate	Amount
1	Baggage Handling System (5 Islands X22 counters) including Arrival, departure and transfer systems	Mtrs	7500	7,50,000	5,62,50,00,000
2	Inline CT Screening system including Lvl 1 to Lvl 4	Nos	6	15,00,00,000	90,00,00,000
3	ATRS	Nos	0	1,45,00,000	-
4	Matrix / Central Control Center	Lot	1	8,00,00,000	8,00,00,000
5	Misc Works for BHS	Lot	1	1,00,00,000	1,00,00,000
	Structures and civil works for BHS Systems	Lot	1	15,00,00,000	15,00,00,000
					6,76,50,00,000

ANNEXURE-18
Submission by GHIAL - GHIAL MP Update- T1 Capacity Assessment Technical Note

Jacobs

Terminal 1 Capacity Assessment

Date: 28 February 2026
Project name: GHIAL Master Plan Update 2026
Project no: 87F57300
Prepared by: Mihir Baxi
Document no: GHIAL-JAC-P-MPL-V-PDR-004
Revision no: R2

iLabs Centre, Plot no-18
Floor 8, Block C
Software Units Layout
Madhapur, Hyderabad
Andhra Pradesh 500081
India
T +91 406 616 2400
www.jacobs.com

1. T1 Capacity Assessment

1.1 Introduction

This Technical Note summarises the Terminal 1 capacity assessment at Rajiv Gandhi International Airport (RGIA) completed as part of the Master Plan 2026 Update exercise. The passenger traffic at RGIA reached 29.4 million annual passengers (MAP) in FY2025 and is still growing. The traffic is expected to reach 40 MPPA between FY2027 and FY2028.

The objective is to determine the current operational capacity of the terminal under peak-hour conditions, identify critical bottlenecks across all key process streams (departures, arrivals, transfers) and estimate the corresponding annual passenger capacity.

The number of facilities currently provided within the terminal building and relevant operational parameters, such as passenger processing times, were inputs to the analysis.

The following sources have been referred to for input data on the existing provision of facilities and current operational parameters:

- Floor plan drawings of all Terminal 1 levels.
- BCAS Terminal requirement guidelines.

The findings will inform infrastructure planning decisions and highlight the areas requiring operational improvements, or capital upgrades, that will be required to increase the capacity and meet the growing demand.

1.2 Approach and Methodology

This section describes the approach taken to carry out the capacity assessment of the current Terminal 1 at RGIA. Where possible, calculations based on BCAS Terminal requirement guidelines have been used. In cases not covered by BCAS guidelines, IATA ADRM 12th Edition has been adopted.

With regard to the capacity calculations, the ADRM approach allows to define the processor requirements (number of passenger processing facilities to provide within the terminal) against the demand, rather than allowing to evaluate the capacity of existing facilities. Therefore, it was necessary to reverse the ADRM standard calculations to obtain the capacity figures based on the actual provision of facilities. For processors where the ADRM calculations are not available, own methods have been employed.

The T1 capacity has been determined by analysing the main passenger processing areas for both the departure and arrival flows, separated into domestic and international where applicable. The results are expressed in Peak Hour Passengers (PHP). The capacity of the lowest performing facility for each flow determined the overall terminal capacity.

1.3 Existing Terminal

The passenger terminal at RGIA, Hyderabad was originally designed for a capacity of 12MPPA, with scalability up to 20 MPPA. The terminal has been recently expanded to 3,79,370 sqm and it is now expected to provide a declared capacity of 34 MPPA. The existing terminal building and the new expansion are fully integrated and function as a one-terminal structure.

The terminal is a multi-level building designed to ensure complete segregation of arrival and departure flows across separate levels. It features a linear pier configuration with a centralized processor head house, enabling efficient passenger movement. Dedicated zones cater to domestic and international traffic separately, while

processing functions are distributed across multiple levels to maintain operational efficiency and minimize congestion.

The design incorporates a three-level curb system for streamlined landside operations, providing distinct levels for departures, arrivals and parking circulation. This configuration supports high throughput and enhances passenger convenience while maintaining robust security and operational standards.

The building has also achieved LEED Platinum certification, positioning RGIA among the most sustainable airports globally.

The extent of the terminal is shown in the below figure.

Figure 1-1 Terminal Area Plan with extent of expansion

1.4 Terminal Layout

The Terminal has 7 levels and the functional distribution of the spaces inside are listed below:

- **Level B (-5.0 m)** Plant, logistics, staff facilities, commercial storage, goods screening.
- **Level C (0.0 m / -3.0 m)** Baggage handling, bus lounges, VVIP lounge, airline ticketing offices.
- **Level D (+0.0 m / +3.5 m)** AOCC, baggage reclaim, check-in luggage customs, arrivals concourse, ground transport counters, GHIAL offices.
- **Level E (+7.5 m)** Immigration, hand-baggage customs, arrivals retail, lounges, airline offices, operations offices.
- **Level F (+12.5 m)** Departures concourse, check-in islands, emigration counters, security screening, duty-free retail, gate lounges.
- **Level G (+17.5 m)** Airline and customs offices.
- **Level H (+21.5 m)** GMR–HIAL executive offices, reception lounge, boardroom.

The passengers have access to the Level C, D, E and F. The other floors are largely reserved for services, offices and other support functions. The Fixed Link Bridges (FLBs) and Passenger Boarding Bridges (PBBs), providing

access to the contact stands, are connected to Level E which is connected to the Departure Level F by escalators and elevators.

The terminal building is supported by departure kerbs and forecourt facilities. Both arrival and departure kerbs have retail and passenger facilities to facilitate the passenger comfort.

The total processing facilities available in the existing terminal for departure and arrival are detailed in the below tables.

Table 1-1 : Departure Processor Summary

Sr No.	Description	No. of Units
1.1	**Terminal Entrance**	
	Number of Terminal entrances (passengers)	17
	Number of Terminal entrance control points (Including Digi-yatra)	16
1.2	**Check-in Counters / Kiosks**	
	Check in Desks (traditional)	113
	Self-service Kiosks (CUSS)	64
	Self-Bag Drop (SBD)	47
1.3	**Security Check**	
	Boarding Pass Control (Prior Security) - Dom	26
	Boarding Pass Control (Prior Security) - Int	10
	ATRS (Domestic)	14
	ATRS (International)	6
	ATRS (Swing)	4
1.4	**Emigration**	
	Emigration Counters (Standard)	47
	E-Passport Emigration Points (Fast Track Immigration)	4
1.5	**Boarding Gates**	
	Contact – Domestic	24
	Contact – International	19
	Contact – Swing	0
	Remote (Bussing) – Domestic	24
	Remote (Bussing) – International	4

Table 1-2 : Arrival Processor Summary

Sr. No	Description	No. of Units
2.1	**Arrival Immigration**	
	Total Immigration Counters	64
	Fast Track Immigration Counters	4
2.2	**Custom Hand Baggage X-Ray**	
	Customs Hand Baggage Security X-ray	7
2.3	**Baggage Claim & Customs**	
	Domestic Baggage Reclaim Belts	7
	International Baggage Reclaim Belts	5
	Swing Baggage Reclaim Belts	2

	Domestic baggage presentation length (long belt)	90m
	Domestic baggage presentation length (short belt)	60m
	International baggage presentation length	90m
	Swing baggage presentation length	90m
2.4	**Transfer Areas**	
	Transfer Security (D-D)	6
	Transfer Security (I-I)	2
	Transfer Security (D-I) - ATRS	3

1.5 Processing Times and other assumptions

The below tables document the processing times assumed for all different processors within the terminal. All other operational parameters that can impact the capacity of the passenger processors have been included in the tables below.

Table 1-3 Processing times

Sr.No	Facility	Processing Time (seconds)	Remarks
1.1	**Terminal Entrance**		
	Terminal entrances (Conventional)	20	As per BCAS
	Terminal entrance (Digi-yatra)	7	
1.2	Check-in		
	Check-in desk - ABD (Domestic)	120	Traditional domestic and international desks considered as per BCAS. BCAS does not provide the breakdown into traditional check-in vs. SBD vs. Kiosks. SBD and self-service kiosks processing time considered as 90s and 60s respectively.
	Check-in desk - ABD (International)	300	
	Check-in desk Self Bag Drop – SBD (Domestic)	*90**	
	Check-in desk Self-Service Kiosk (Domestic)	*60**	
1.3	Emigration		
	Emigration – Combined (Indian and Non-Indian Passport)	133	Traditional desks considered as per BCAS. BCAS does not provide the breakdown into traditional desks vs. e-Gates. 30s for e-Gates were considered.
	Emigration – Fastrack E-Gate	*30**	
1.4	Security		
	ATRS (Domestic)	180	As per BCAS
	ATRS (International)	160	
1.5	Transfer Security (D-D, D-I, I-I)		
	ATRS (Domestic)	180	As per BCAS
	ATRS (International)	160	
2.1	Immigration		
	Immigration – Combined (Indian and Non-Indian Passport)	180	Traditional desks considered as per BCAS. BCAS does not provide the breakdown into traditional desks vs. fast track. 30s for fast track (e-Gates) were considered.
	Immigration – Combined (e visa biometric and desk)	*210**	

	Immigration – Fastrack	*30**	E-visa processing was also considered as per RGIA current operations. This is split into two parts: first step is the biometric kiosks (240s) and the second step is the traditional desk (180s). Hence, average 210s (17 pax/hr/desk) for combined.
2.2	**Customs**		
	Customs hand baggage screening Xray Machine	*14**	BCAS does not provide customs processing time. 450 bags/hr/machine is assumed, which equals 250 pax/hr/machine (assuming 1.8 bags per pax). This gives a processing time of 14 seconds/pax/machine

Table 1-4 Wait Times

Sr. No.	Facility	Wait Time (minutes)	Remarks
1.1	Terminal Entry	10	As per BCAS
1.2	Check in – Desk (Traditional)	10	As per BCAS
	Check in – Self Service Kiosk	2	No BCAS values, hence IATA ADRM 12th adopted
	Check in – Self Bag Drop	5	No BCAS values, hence IATA ADRM 12th adopted
1.3	Security Control	20	As per BCAS. This wait time does not meet the service level expectations in Concession Agreement (IATA ADRM); hence 10 mins has been considered for capacity assessment.
1.4	Emigration Control - Standard	20	As per BCAS. This wait time does not meet the service level expectations in Concession Agreement (IATA ADRM), hence 10 mins has been considered for capacity assessment.
	Emigration Control – E Gates	5	No BCAS values, hence IATA ADRM 12th adopted
1.5	Immigration Control - Standard	20	As per BCAS. This wait time does not meet the service level expectations in Concession Agreement, hence 10 mins has been considered for capacity assessment.
	Immigration Control – E Gates	5	No BCAS values, hence IATA ADRM 12th adopted
1.7	Customs Control	5	No BCAS values, hence IATA ADRM 12th adopted

Table 1-5 Other parameters

Function	Parameter	Units	Other Parameters	Remarks
Check in	Inefficiency factor for airline dedicated desk allocation	%	10	Operational assumption
	Web check-in (domestic pax who bypass terminal check-in and do not drop bags)	%	20	Operational assumption
	Domestic passengers using CUSS kiosks (step 1 only)	%	30	Operational assumption
	Domestic passengers using SBD (step 2 only)	%	30	Operational assumption
	Domestic passengers using conventional check-in counters (Check-in + Bag drop)	%	50	Operational assumption
	Average Occupancy Time (Domestic)	minutes	25	Operational assumption
	Average Occupancy Time (International)	minutes	40	Operational assumption
	Number of flight per Belt (Long belt) – Domestic	No.	1.5	Operational assumption
	Number of flight per Belt (Short belt) – Domestic	No.	1	Operational assumption
	Number of flight per Belt – International	No.	1	Operational assumption
All	Inefficiency factor for maintenance, unstaffed, etc	%	10	Operational assumption
All	% 30 min peak departing passengers	%	60	Tower log FY2025
Boarding gates	Contact gate Occupancy/flight (Domestic)	Minutes	60	Based on Stand Analysis for RGIA
	Bus gate Occupancy/flight (Domestic)	Minutes	40	Operational assumption
	Contact gate Occupancy/flight (International)	Minutes	90	Based on the Stand Analysis for RGIA
	Bus gate Occupancy/flight (International)	Minutes	50	Operational assumption
	Number of Passengers in Design Aircraft - International	Pax	237	Tower log FY2025
	Number of Passengers in Design Aircraft - Domestic	Pax	140	Tower log FY2025

1.6 Terminal Capacity

The capacity assessment of the different processing areas shows that key T1 processing facilities are running at full capacity and need to be improved to ensure the terminal can seamlessly meet the current and upcoming demand. Some areas need to be enhanced to appropriately balance the capacities at the various facilities and provide optimum level of service throughout the processor.

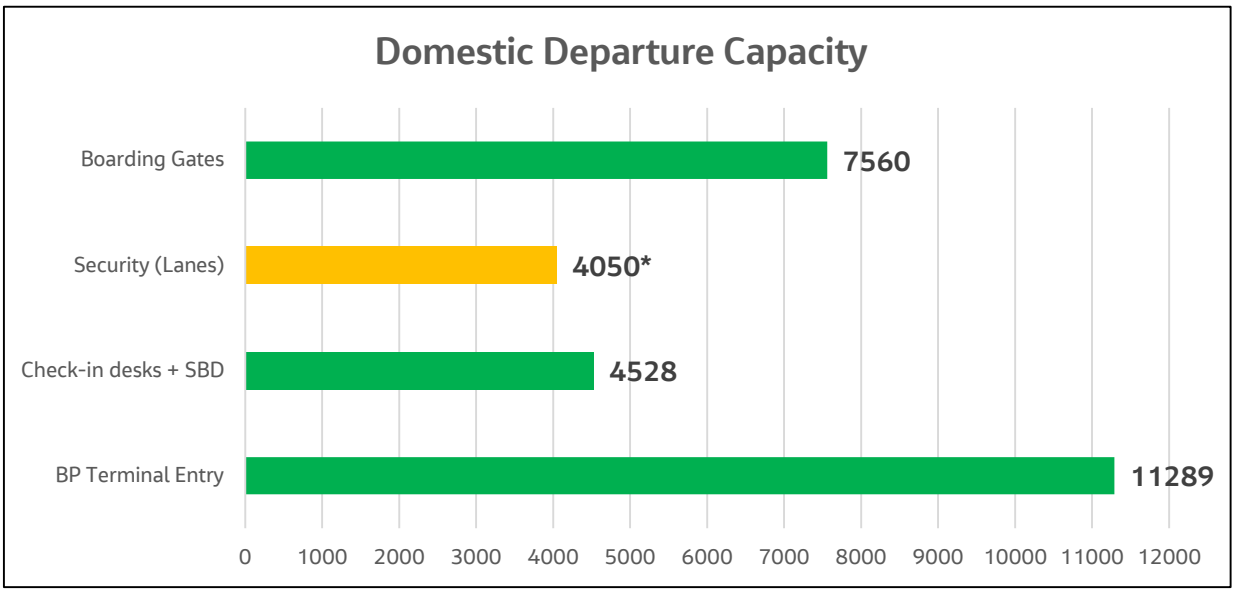
The designed capacity of the terminal was calculated before the BCAS guidelines were issued. The current capacity assessment considers BCAS guidelines where applicable, hence the declared capacity has reduced from the earlier assessment. Further details are presented in the following sections.

1.6.1 Domestic Capacity

The overall domestic processor capacity is constrained by the baggage reclaim belts (which also corresponds to the domestic arrivals capacity). The domestic departures are limited by the ATRS Security lanes. The capacity as per BCAS is higher as 20 minutes wait times are proposed to be used. However, if 10-minute wait times are applied similar to other processes the capacity will be limited to only 3,240.

The domestic arrival capacity is only dependent on the capacity of baggage reclaim to handle the peak hour flights. There are no BCAS guidelines for baggage reclaim facilities. The domestic reclaim hall has 7 belts of 90m and 2 belts of 60m presentation length. The total peak handling capacity of these baggage belts is 27 ATMs at RGIA. Based on 145 pax/ATM the peak hour passenger capacity is about 3,915 passengers.

Figure 1-2 Domestic Departure Processing Capacity



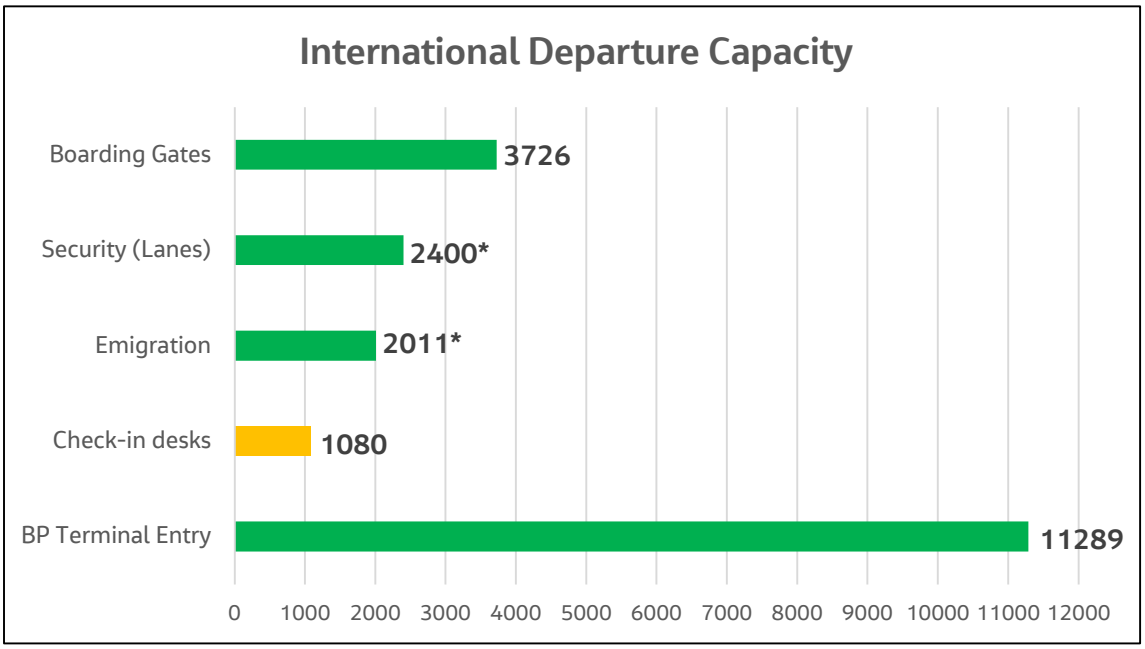
**Note: If 10-minute wait time is considered, security capacity reduces from 4,050 PHP to 3,240 PHP.*

1.6.2 International Capacity

The overall international processors capacity is constrained by the check-in facilities (which also corresponds to the international departures capacity), as all the passengers are required to use the counters for verification of the documents. The international arrivals are limited by the customs facilities.

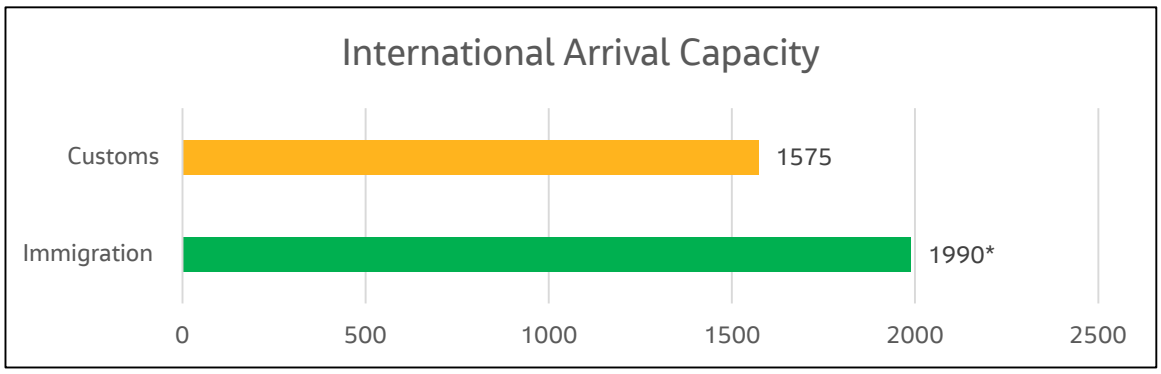
International check-in capacity is driven by airline-specific counter allocations. Demand at these counters is significantly higher for international passengers, as all travellers must use traditional staffed desks for document verification. Given the longer processing times involved, the check-in capacity for international passengers is substantially lower than that of domestic passengers for the same number of counters.

Figure 1-3 International Departure Processing Capacity



**Note: If 10-minute wait time is considered, security capacity reduces from 2,400 PHP to 1,920 PHP and Emigration capacity reduces from 2,011 PHP to 1,693 PHP.*

.**Figure 1-4 International Arrival Processing Capacity**

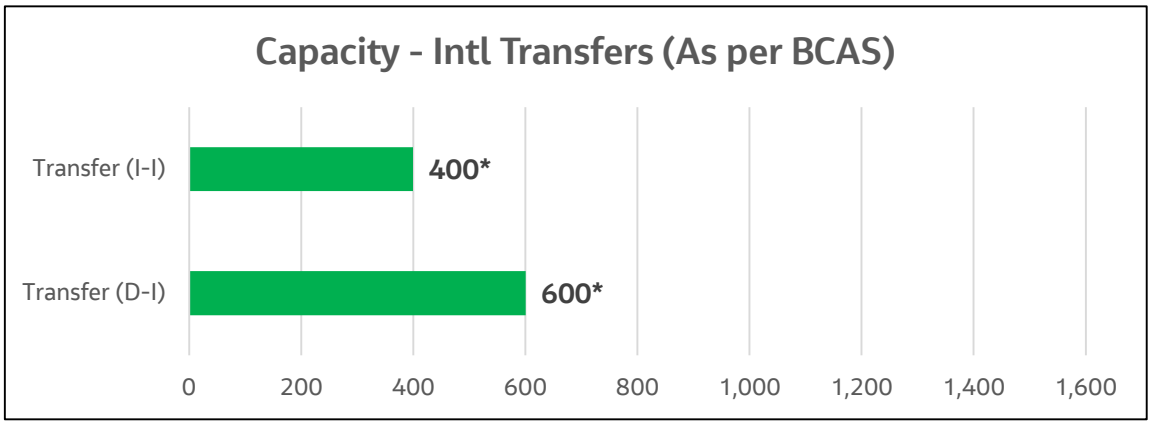


**Note: If 10-minute wait time is considered, Immigration capacity reduces from 1,990 PHP to 1,686 PHP.*

1.6.3 Transfers Capacity

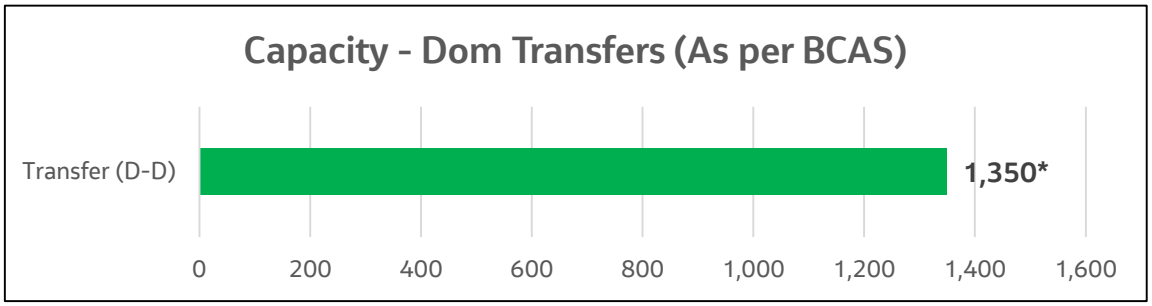
The terminal has sufficient capacity to cater to transfer demand. The capacity of different transfer processes is shown in the figures below.

Figure 1-5 International Transfers Processing Capacity



**Note: If 10-minute wait time is considered, Transfer (I-I) capacity reduces from 400 PHP to 320 PHP and Transfer (D-I) capacity reduces from 600 PHP to 480 PHP.*

Figure 1-6 Domestic Transfers Processing Capacity



**Note: If 10-minute wait time is considered, Transfer (D-D) capacity reduces from 1,350 PHP to 1,080 PHP*

1.6.4 Baggage Make-up Positions

The Baggage Handling System (BHS) of the terminal has also been assessed. The main constraint at Terminal 1 at RGIA was found to be the make-up positions (MUPs) which are located in the basement level of the building. A detailed analysis for the demand of baggage makeup units was completed based on the current peak day schedule. The Baggage Make-up area is common use at RGIA hence the capacity assessment was completed based on the assumption that the make-up positions will be shared between domestic and international flights.

To assess the demand of the make-up units the assumptions shown in the below table were used.

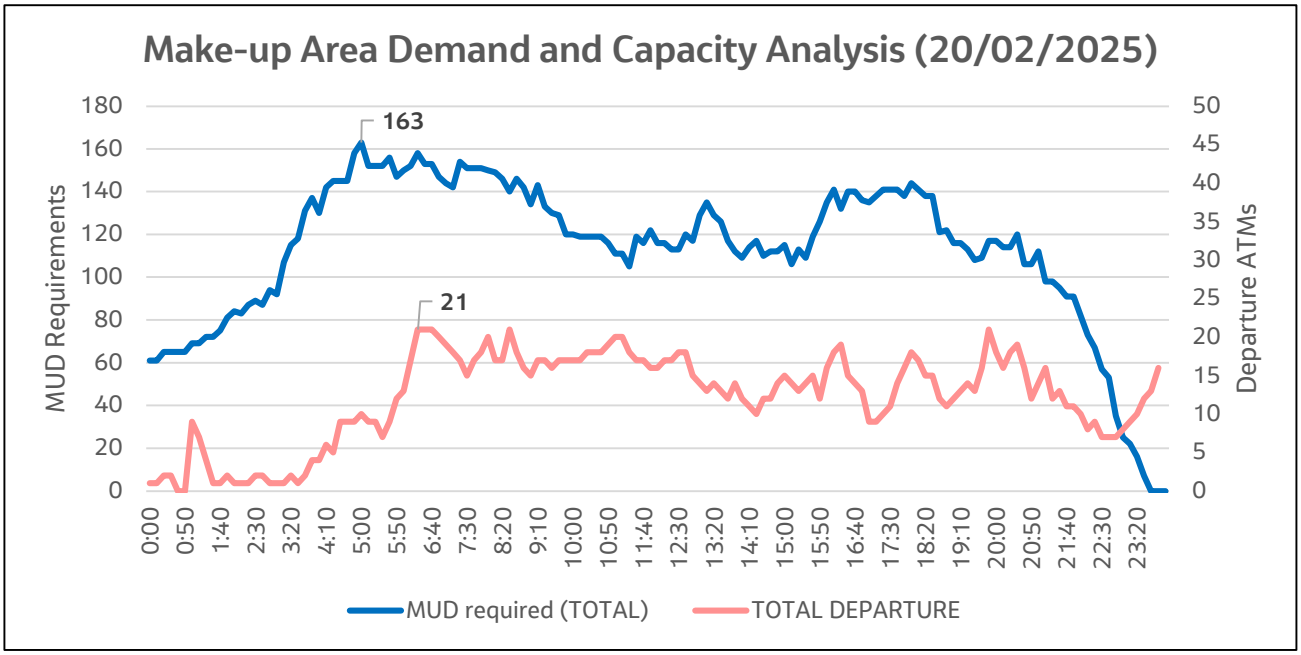
Table 1-6 Baggage Make-up Positions assumptions

	Unit	Domestic – Code C	International – Code C	International – Code E
Make up position open time	**Hr**	**3**	**4**	**5**
Make up position Close time	**Hr**	**1**	**1**	**1**
Active Make up positions	**No.**	**3**	**4**	**8**

The total make-up positions available in T1 at RGIA on Level B and C are 147. The total demand based on the above assumptions is 163. The demand across the day for make-up positions is shown in the figure below.

The current MUP positions are already operating at peak capacity, and the demand for the current traffic is being managed by actively managing the make-up demand and rotating the open positions per flight. The increase in traffic will result in further management of the operations to meet the demand.

Figure 1-7 Makeup Position Demand for peak day



1.6.5 Terminal Kerbside

The kerb and parking facilities play a critical role in supporting the overall terminal capacity and ensuring smooth passenger processing. Adequate kerbside capacity is essential to maintain balanced and efficient operations throughout the terminal.

Landside kerb capacity has been assessed based on peak traffic volumes, modal splits, vehicle occupancy, and dwell times for passenger drop-off and pick-up. At RGIA, the arrival and departure kerbs are located on separate levels, and their capacities have been evaluated independently. The inner kerb at both levels is designated for VIP use, while the outer kerb serves regular passengers.

An assessment of kerb capacity, based on available length and key operational assumptions, was compared against the projected demand for 2027 and 2030. The analysis indicates that the outer kerbs at both arrival and departure levels will be unable to maintain Level of Service C by 2027, when annual passenger traffic is expected to reach 36.8 MPPA.

Table 1-7 Terminal Kerb Capacity

Kerb	Available Effective Kerb Length (m)	2027			2031		
		Estimated Kerb Length (m)	Utilization Ratio	LOS	Estimated Kerb Length (m)	Utilization Ratio	LOS
Inner Kerb	180	131	0.6	LOS A	175	0.8	LOS A
Outer Kerb	231	450	1.5	LOS D	603	2.0	LOS F
App Taxi Pickup	531	186	0.2	LOS A	250	0.3	LOS A
Arrival	**942**	767	**0.5**	**LOS A**	1028	**0.7**	**LOS A**
Inner Kerb	220	123	0.52	LOS A	169	0.72	LOS A
Outer Kerb	261	418	1.45	LOS D	574	2.00	LOS E
Departure	**481**	**540**	**1.03**	**LOS B**	**742**	**1.42**	**LOS D**

1.6.6 Total Annual Capacities

The peak traffic capacity for domestic and international segments has been converted to annual traffic based on the forecast traffic patterns and associated peak to annual ratios. The peak hour capacity of Domestic processor is 3,102 and International processors is 1080. The annual capacity based on peak passenger handling capacity is shown in the table below.

Table 1-8 Terminal Annual Capacity

	Terminal 1 Capacity Summary	
	Domestic	**International**
Identified capacity bottleneck (O/D)	Security	Check-in
Peak Hour Passenger Capacity (O/D)	3,240	1,080
Corresponding Annual Passenger Capacity (O/D)	19,555,800	3,590,522
Annual Transfers Capacity	11,472,475	
Combined Annual Capacity	**34,613,183**	

The total capacity of Terminal 1, based on the peak hour handling capacity is limited to 34.6 MPPA. The passenger processing capacity is dependent on the Baggage Reclaim area for domestic and Check-in counters for International. Another main constraint, which will impact the airport capacity, is the availability of baggage makeup positions for departure process. Any increase in demand is expected to result in operational delays.

Table 1-9 Comparison of Capacity and Demand

Description	Designed Peak Capacity	Peak Capacity based on BCAS	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Domestic Departure	5,102	4,050	3,137	3,190	3,995	4,563
Domestic Arrival	5,990		3,079	3,108	3,825	4,303
International Departure	1,728	1,080	1,383	1,393	1,697	1,895
International Arrival	1,871		1,250	1,263	1,539	1,720

Table 1-10 Annual and Peak ATMs

Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Annual Traffic	29.4	31.5	36.8	42.1
Total Peak ATMs	40	42	47	51
Departure Peak ATMs	19	21	23	25
Arrival Peak ATMs	20	21	24	26

The airport is expected to cross this demand threshold in next couple of years and hence it is important to identify possible changes to meet the demand.

2. Terminal Improvements

To increase the capacity of the terminal following solutions have been proposed:

1. Swing the ATRS machine to improve the domestic capacity processing.
2. Increased allocation of check-in counters in international peak.
3. BMA Upgrade and Transfer Bags storage.

GHIAL has planned the following other projects, in the interim, to improve the capacity and meet the demand in the short term. These changes are expected to allow the airport to manage the demand for peak hour up to 37 MPPA. The details of the development projects planned are included in the table below:

Table 2-1 Terminal improvement projects

Sl. No.	Nature of Work	Project	Expected Costs INR Crores
01	Terminal Side	BHS-BMA Upgrade and Transfer Baggage Storage Management	25
02	Terminal Side	Improvement of Departure & Arrival Entry & Exit NAKA	13
03	Terminal Side	Conversion from SBD to ABD (check-in island reconfiguration)	6
04	Terminal Side	Conversion of 8 Swing PESC (16 Domestic, 8 Swing, 5 International) and Civil Work (Partitions and DOM Movement)	6
05	Terminal Side	Addition of One Machine in PESC Area for D-to-D Transfer	5
06	Terminal Side	Other Miscellaneous	3
Total			**58**

The key projects address the lack of capacity in the BMA area by enhancing the bag storage to allow for better utilisation of the space and system. Similarly, the change from SBD to ABD will allow for better availability of counters for the international passengers. The peak hour capacity will increase to 1,488 passengers with the proposed changes.

The conversion of the PESC area to swing will provide more capacity in Domestic security which is identified to be the next bottleneck. Based on initial assessment only one belt can be converted to swing immediately which will increase the peak capacity to 3,420 passengers.

These improvements will allow for increasing the peak hour capacity of the terminal to meet the annual traffic demand up to 37 MPPA approximately. Further increase in the airport capacity will need effective management of terminal operations or major change in the infrastructure. The airport can increase the annual capacity further using peak spreading and process improvements, but new infrastructure will be required beyond 40 MPPA.

Additionally, some other infrastructure changes related to landside and airside will be required to balance the increased terminal capacity of 37 MPPA. These changes will only be undertaken once the terminal capacity is improved.

3. Conclusion

The assessment evaluates the performance of all key passenger processing systems based on existing infrastructure, BCAS requirements, and operational parameters currently in use at the airport.

The findings indicate that Terminal 1 is approaching its practical operating limits, with domestic capacity constrained primarily by baggage reclaim and international capacity limited by check-in processing. The analysis further identifies baggage make-up positions and kerbside operations as critical pressure points, with both systems expected to fall short of acceptable service levels as traffic demand increases. The overall terminal capacity is estimated at 34.6 MPPA, and airport demand is projected to surpass this threshold within the next planning period.

In response, GHIAL has proposed targeted operational and infrastructure interventions—including upgrades to the BHS/BMA systems, reconfiguration of check-in facilities, expansion of domestic security screening capacity, and enhancements to baggage reclaim flexibility. These measures are designed to ensure compliance with required service standards and maintain stable operational performance up to approximately 37 MPPA, pending implementation of long-term terminal development initiatives. Any further increase in annual traffic can be achieved by peak spreading and process improvements. The airport needs to add further capacity beyond 40 MPPA to meet the long-term demand.

ANNEXURE-19
Submission by GHIAL - Landscape work estimate GHIAL North precinct

Note on Cost of LANDSCAPE
Project : Development of Northern Precinct at GHIAL, Shamshad

This note is prepared to derive the cost estimate for Landscape works for development of Northen Present at GHIAL.

Ref : Most recent EPC contract signed with M/s L&T Limited for development of Landscape works at Bhogapuram Airport is considered
The Overall EPC Contract value is Rs. 3668 Crores and work was scheduled to be competed by April 2026.

	As per L&T EPC Contract for Bhogapuram		
2.13.1	Passenger Terminal Building -Landscape		36,47,26,571
2.13.2	ATC & TCTB, All Ancillary Buildings - Landscape		14,35,14,481
	Sub Total		**50,82,41,052**
1.1	Contractors Over head as per Cost centre 1	10.26%	5,21,45,532
	TOTAL		**56,03,86,584**
	GST		**10,08,69,585**
	Grand Total		**66,12,56,169**
	Terminal Area	SQM	66,500
	Capacity		6 MPPA
	Total development area of Bhogapuram (B^1)	**Sqm**	**70,00,000**
	Rate per Sqm (Completion year April 2026)	**Per Sqm**	94.47
	Escalation	6%	
	Present Price×$(1+r)^n$		
	Add Escalation of 6% YoY for 4 years for completion year Dec 2029		**118**
	Cost for North Present Cost		
	Proposed CP 4 Development area H^1	Sqm	65,00,000
	Proportionate Base cost for RGIAL- Northen present development		**76,93,96,033**

(B^1) Area measured - approx. develop area for Phase 1 of Bhogapuram airport incl Airside, forecourt and terminal. Excl commercial land development

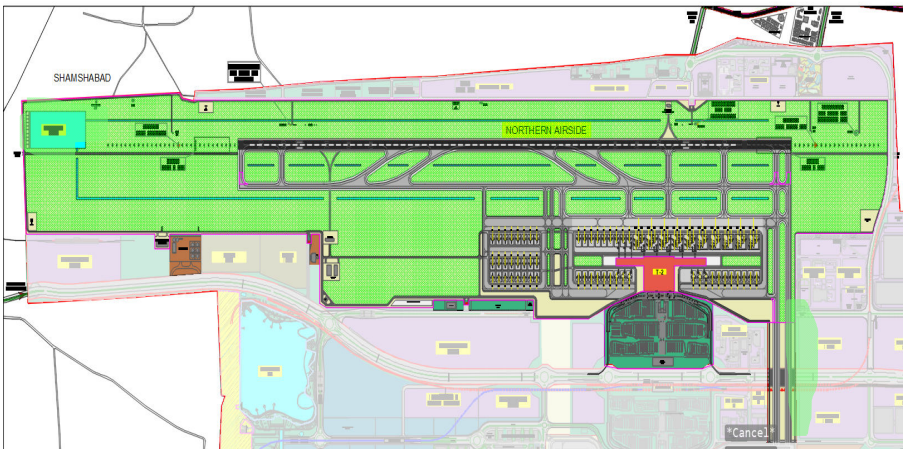
(H^1) Area measured - approx. develop area for CP4 Development of Hyderabad incl Airside, forecourt and terminal. Excl commercial land development

Landscape areas include but not limited
PTB all areas, Fore court, arrival and departure ramps, Car park, approach roads, AAI technical Block, PTC buildings and other key builds shall be covered

PHASE 1 MASTER PLAN - BHOGAPURAM INTERNATIONAL AIRPORT

Total development area of Bhopgapuramm (B^1) 70,00,000.00 Sqm

GHIAL: CP-4 MASTER PLAN



Proposed CP 4 Development area H^1 65,00,000.00 Sqm

24		**2.13.1**	**Passenger Terminal Building -Landscape**	**364,726,571**	**1.17%**				
		2.13.1.1	Softscape			101,212,211	27.75%		
		2.13.1.1.1	Execution of Work					98,175,845	97.00%
		2.13.1.1.2	Completion of Sub Cost Centre					3,036,366	3.00%
		2.13.1.2	Hardscape			203,243,283	55.72%		
		2.13.1.2.1	Execution of Work					197,145,985	97.00%
		2.13.1.2.2	Completion of Sub Cost Centre					6,097,298	3.00%
		2.13.1.3	Canopy			49,453,157	13.56%		
		2.13.1.3.1	Issurance of PO					4,945,316	10.00%
		2.13.1.3.2	Supply of Materials (at Site)					24,726,579	50.00%
		2.13.1.3.3	Execution of Work					18,297,668	37.00%
		2.13.1.3.4	Completion of Sub Cost Centre					1,483,595	3.00%
		2.13.1.4	Irrigation System			10,817,920	2.97%		
		2.13.1.4.1	Execution of Work					10,493,382	97.00%
		2.13.1.4.2	Completion of Sub Cost Centre					324,538	3.00%
		2.13.1.5	Water Features			-	0.00%		
			Subtotal of Sub costcenter item (24)			**364,726,571**	**100%**		
25		**2.13.2**	**ATC & TCTB, All Ancillary Buildings - Landscape**	**143,514,481**	**0.46%**				
		2.13.2.1	Softscape			100,144,427	69.78%		
		2.13.2.1.1	Execution of Work					97,140,094	97.00%
		2.13.2.1.2	Completion of Sub Cost Centre					3,004,333	3.00%
		2.13.2.2	Hardscape			5,284,331	3.68%		
		2.13.2.2.1	Execution of Work					5,125,801	97.00%
		2.13.2.2.2	Completion of Sub Cost Centre					158,530	3.00%
		2.13.2.3	Canopy			-	0.00%		
		2.13.2.3.1	Execution of Work					-	0.00%
		2.13.2.3.2	Completion of Sub Cost Centre					-	0.00%
		2.13.2.4	Irrigation System			16,265,454	11.33%		
		2.13.2.4.1	Execution of Work					15,777,490	97.00%
		2.13.2.4.2	Completion of Sub Cost Centre					487,964	3.00%
		2.13.2.5	Water Features			21,820,269	15.20%		
		2.13.2.5.1	Execution of Work					21,165,661	97.00%
		2.13.2.5.2	Completion of Sub Cost Centre					654,608	3.00%

ANNEXURE-20
Submission by GHIAL - Northern Precinct Terminal Cost Back-up

Particulars		Reference	Amount	Adjustments*	Base cost(Cr)
Expansion of the Terminal Building including Piers	Rs Cr	Table 26 of MYTP submission	2,916.03	27.65	2,888.38
Airport systems		Table 26 of MYTP submission	1,141.80		1,141.80
Total cost			**4,057.83**	**27.65**	**4,030.18**
Area in Sqm					2,58,089
Cost Per Sqm	**Rs**				**1,56,148**

* IT cost separately considered

List of Pos

SL NO	Vendor Code	Contractor Name	PO no	PO Date	PO Amount	Remarks
1	130314	LARSEN &TOUBRO LIMITED	5200056614	26-10-2018	27,53,78,67,459	
2	201742	Megawide Construction Singapre Pte Ltd	8100000368	18-01-2019	9,06,54,00,000	
3	128525	BEUMER INDIA P LTD	5000011747	27-08-2020	1,52,48,01,902	
4	333758	MATERNA IPS INDIA PRIVATE LIMITED	5000013668	07-01-2022	33,22,03,842	
5	129283	MACDONALD HUMFREY (AUTOMATION) INDIA PRIVATE LIMITED	5200054951	01-06-2018	13,68,34,489	
6	200470	C C M, ITALY	5100000390	29-10-2021	11,68,32,622	PO in EURO 9,50,000.23
7	200536	VITRA INTERNATIONAL AG	5100000391	29-10-2021	10,12,07,897	PO in EURO 8,24,900
8	134252	TK ELEVATOR INDIA PRIVATE LTD	5000017761	07-08-2024	6,55,50,724	
9	131499	SMITHS DETECTION SYSTEMS PRIVATE LIMIT	5000013903	09-05-2022	5,38,29,416	
10	310874	MILLENNIUM AERO DYNAMICS PVT. LTD.	5000012016	28-12-2020	5,14,95,200	
11	134252	TK ELEVATOR INDIA PRIVATE LTD	5000017760	07-08-2024	5,08,00,001	
12	129283	MACDONALD HUMFREY (AUTOMATION) IND	5000013134	09-02-2022	4,53,10,811	
13	332652	Grotech Landscape Developers.	5000013060	17-01-2022	4,36,78,708	Final executed value only considered
14	335433	DABICO AIRPORT SOLUTIONS INDIA	5200078316	18-04-2024	4,25,70,770	
15	335461	CREATIVE DESIGN	5000017016	06-05-2024	4,02,24,009	Final executed value only considered
16	314679	VIJAY NIRMAN COMPANY PVT LTD	5200054419	13-04-2018	3,50,92,259	
17	128525	BEUMER INDIA P LTD	5000020491	24-07-2025	3,37,42,771	
18	134003	ADITI IRRIGATION TECHNOLOGIES PVT LTD	5000013311	24-03-2022	3,35,30,155	
19	107680	FEATHER LITE OFFICE SYST	5000013368	07-04-2022	3,17,83,502	
20	400300	Rapiscan PTE Limited	8100000337	06-03-2018	3,05,20,168	PO in USD 3,95,788
21	312062	MICRON ELECTRICALS	5200053123	19-01-2018	2,89,92,175	Final executed value only considered
22	134003	ADITI IRRIGATION TECHNOLOGIES PVT LTD	5000013900	09-02-2022	2,88,93,697	Final executed value only considered
23	327044	DHRUVA INFRA	5000017325	19-06-2024	2,74,27,413	

24	306894	LR CONSTRUCTIONS	5000017299	17-06-2024	2,37,41,923	Final executed value only considered
25	327840	SWATHI AIRPORT SUPPORT SERVICES PRIVA	5000014311	02-11-2022	2,12,48,821	Final executed value only considered
26	130924	GLOBAL AQUA TECHNOLOGIES	5000018186	30-09-2024	2,00,42,890	
		Sub-total (> Rs 2 Cr)			**39,52,36,23,625**	
		Vairous Misc contracts (Rs < 2 Cr)			77,61,02,936	
		TOTAL			**40,29,97,26,561**	

ANNEXURE-21
Submission by GHIAL - Note on Escalation Submission to Govt

1. BACKGROUND

The objective of submitting the Escalation / Price Variation claim is to account for actual market fluctuations that have occurred in key cost-driving components during the execution period of the project. These variations—arising from changes in material prices, labour wages, forex costs, and general inflationary pressures—are beyond the control of the contractor and have a material impact on the overall project cost.

Prior to the award of the contract, a provisional escalation had been computed and submitted based on future cost forecasts of critical price-sensitive components. This was necessary to reflect anticipated market conditions and ensure realistic cost planning at the tendering stage. However, under the EPC Contract framework, there are no contractual provisions for adjusting prices to match actual market variations encountered during the execution period. As a result, the contractor bears the full impact of unforeseen and significant cost escalations unless formally recognized through an escalation submission.

Over the last five years, the industry has witnessed substantial increases across major cost indices, including:

- Material Prices: Noticeable escalation in steel, cement, and other construction materials due to supply-chain disruptions, commodity market volatility, and global pricing trends.
- Labour Wages: Periodic statutory revisions in minimum wages and increased labour demand have consistently driven wage levels upward.
- General Inflation Indicators: Indices such as WPI and CPI have shown upward movement, reflecting broad-based inflation affecting procurement, logistics, and services.
- Forex Indicators: Foreign Currency such as Euro, USD etc have shown upward movement, reflecting and upward global pricing trends.

These cumulative changes have had a direct and measurable influence on project input costs. The detailed escalation data, covering key indices and their movement over the five-year period, is enclosed herewith for review and consideration.

This submission is therefore made to ensure fair compensation for actual market-driven variations, align the project financials with current economic realities, and support seamless continuation of the project without undue financial burden on the contractor.

2. BASIS OF COMPUTATION

Escalation has been calculated using official and widely-accepted indices published periodically by government/statutory bodies for the following categories:

- WPI (Wholesale Price Index) for manufactured goods and key construction materials. Data taken from RBI publication.
- CPI (Consumer Price Index) for labour-related components. Data taken from RBI publication.
- Steel and Cement Price Indices for major construction materials. Data taken from RBI publication
- Minimum Wage Notifications for skilled and unskilled workforce cost adjustments. Data taken from Labour & Employment ministry publication.
- Currency Exchange Rates (EURO, USD) where imported materials, equipment, or services are involved. Data taken from RBI.
- Historical Metal Prices as per London Metal Exchange

These indices reflect the actual market behaviour and provide a transparent and justifiable basis for escalation.

3. METHODOLOGY ADOPTED

CAGR (Compound Annual Growth Rate) methodology has been considered while computing escalation considering upward or downward trend. CAGR is one of the most reliable methods as It provides a stable, annualized growth rate that smooths out volatility and reflects the true underlying trend and particularly appropriate for escalation in construction projects.

Formula:

$$\text{CAGR} = \left(\frac{\text{Last Year Value}}{\text{First Year Value}}\right)^{1/(N-1)} - 1$$

Where N is the numbers in Years

Hence the following values have been arrived

Particulars	Yearly WPI (All Commodities)
FY 2025	154.9
FY 2021	123.4
CAGR	5.85%

The above escalation factor has been used for the calculation at 5.80%.

4. SUMMARY OF OBSERVED TRENDS OVER THE LAST FEW YEARS

During the reviewed period, the indices indicate:

SR No	Indicator	First Year	Last Year	First Year Value	Last Year Value	Escalation
1	WPI	Apr-20	Dec-25	119.200	157.000	5.97%
2	CPI	Apr-20	Nov-25	114.583	148.200	5.67%
3	Steel	Apr-20	Apr-25	152.600	214.100	8.83%
4	Cement	Apr-20	Apr-25	145.700	197.400	7.88%
5	Min Wages (Central - Skilled)	Apr-20	Oct-25	764.000	981.000	5.71%
6	EURO	Apr-20	Jan-26	82.217	109.566	6.13%
7	USD	Apr-20	Jan-26	75.828	91.898	4.06%
8	Overall	Apr-20	Apr-25	131.600	164.900	5.80%

All calculations strictly follow the escalation formulae, index linkages, and adjustment mechanisms

- A steady rise in WPI and CPI @ 5.97% & 5.67% respectively, reflecting overall inflation in goods and services.
- Noticeable increases in steel and cement prices @ 8.83% & 7.88% respectively, driven by global commodity cycles.
- Minimum wages @ 5.71% showing upward revision to align with rising cost of living.
- Overall indices increase @ 5.80%

Metals:

- Aluminium prices in April 2020 was USD 1460 / MT which went up to USD 3135 in Jan 2026. An increase of approx. 14.2% CAGR Since 2020. *Ref LME
- Copper prices in April 2020 was USD 2.25 per pound which went up to USD 5.92 USD per Pound in Jan 2026. An increase of approx. 18.30% CAGR since 2020. * Ref LME
- Both Matels have significant cost impact on Architecture elements, electrical equipment, components, cables and wires.

Forex

- Foreign Currency fluctuations particularly EURO & USD @ 6.13% & 4.06% respectively impacting imported materials and equipment costs.

These trends collectively justify the escalation claim as the project cost environment has undergone substantial variation. Escalation of average 5.8% for on cost estimate is reasonable.

Documentary support for indices and relevant notifications is attached for reference.

ANNEXURE-22
Submission by GHIAL - CMW 2020

ANNEXURE-22

File No.1/VDA(3)/2020-LS-II
Government of India
Ministry of Labour& Employment
Office of the Chief Labour Commissioner(C)
New Delhi

Dated: 08/5/2020

ORDER

In exercise of the powers conferred by Central Government vide Notification No. S.O. 188(E) dated 19th January, 2017 of the Ministry of Labour and Employment the undersigned, hereby revise the rates of Variable Dearness Allowance on the basis of the average consumer price index number for the preceding period of six months ending on 31.12.2019 reaching 324 from 310.83 (base 2001 = 100) and thereby resulting in an increase of 13.17 points for **Industrial Workers** as under. This order shall come into force w.e.f. 01.04.2020

The rates of Variable Dearness Allowance for employees employed in **CONSTRUCTION OR MAINTENANCE OF ROADS OR RUNWAYS OR IN BUILDING OPERATIONS INCLUDING LAYING DOWN UNDERGROUND ELECTRIC, WIRELESS, RADIO, TELEVISION, TELEPHONE,TELEGRAPH AND OVERSEAS COMMUNICATION CABLES AND SIMILAR OTHER UNDERGROUND CABLING WORK, ELECTRIC LINES, WATER SUPPLY LINES AND SEWERAGE PIPE LINES.**

Category of worker	Rates of V.D.A. Area wise per day (in Rupees)		
	A	B	C
Unskilled	106	88	70
Semi-Skilled/Unskilled Supervisory	116	99	82
Skilled/Clerical	127	116	99
Highly Skilled	138	127	116

Therefore the minimum rates of wages showing the basic rates and Variable Dearness Allowance payable w.e.f. 01.04.2020 will be as under :-

Category of worker	Rates of wages including V.D.A. per day (in Rupees)		
	A Area	B Area	C Area
Unskilled	523+106=629	437+88=525	350+70=420
Semi-Skilled/Unskilled Supervisory	579+116=695	494+99=593	410+82=492
Skilled/ Clerical	637+127=764	579+116=695	494+99=593
Highly Skilled	693+138=831	637+127=764	579+116=695

The VDA has been rounded off to the next higher rupee as per the decision of the Minimum Wages Advisory Board.

The classification of workers under different categories will be same as in Part-I of the notification, whereas classification of cities will be same as in the Part-II of the notification dated 19th January, 2017. The present classification of cities into areas A, B & C is enclosed at Annexure I for ready reference.

(RAJAN VERMA)
CHIEF LABOUR COMMISSIONER(C)

As per list attached

ANNEXURE-23
Submission by GHIAL - CMW 251001

ANNEXURE-23

File No.1/6(1)/2025-LS-II
Government of India
Ministry of Labour & Employment
Office of the Chief Labour Commissioner(C)
New Delhi

Dated: 25/09/2025

ORDER

In exercise of the powers conferred by Central Government vide Notification No. S.O. 186(E) dated **19th January, 2017** of the Ministry of Labour and Employment the undersigned hereby revise the rates of Variable Dearness Allowance for the employees employed in **Agriculture** w.e.f. **01.10.2025** on the basis of the average Consumer Price Index for Industrial workers reaching 413.42 from 402.09 as on 31.12.2024 (Base 2016=100) and thereby resulting in an increase of 11.33 points. The revised Variable Dearness Allowance as under shall be payable from 01.10.2025:-

Category of worker	Rates of V.D.A. Area wise per day (in Rupees)		
	'A'	'B'	'C'
Unskilled	181	167	165
Semi-Skilled/Unskilled Supervisory	198	181	168
Skilled/Clerical	215	198	181
Highly Skilled	237	221	198

Therefore, the minimum rates of wages including the basic rates and Variable Dearness Allowance payable w.e.f. 01.10.2025 to the employees working in Agriculture shall be as under:-

Category of worker	Rates of wages including V.D.A. Area wise per day (in Rupees)		
	A	B	C
Unskilled	333+181=514	303+167=470	300+165=465
Semi- Skilled/Unskilled Supervisory	364+198=562	335+181=516	307+168=475
Skilled/Clerical	395+215=610	364+198=562	334+181=515
Highly Skilled	438+237=675	407+221=628	364+198=562

The VDA has been rounded off to the next higher rupee as per the decision of the Minimum Wages Advisory Board.

The classification of workers under different categories will be same as in Part-I of the notification, whereas classification of cities will be same as in the Part-II of the notification dated 19th January, 2017. The present classification of cities into areas A, B & C is enclosed at Annexure I for ready reference.

(Ashutosh A.T Pednekar)
Chief Labour Commissioner(C)

F.No.1/6(2)/2025-LS–II
Government of India
Ministry of Labour & Employment
Office of the Chief Labour Commissioner(C)
New Delhi

Dated: 25/09/2025

ORDER

In exercise of the powers conferred by Central Government vide Notification No. S.O. 2413(E) dated **28th July, 2017** of the Ministry of Labour and Employment the undersigned hereby revise the rates of Variable Dearness Allowance on the basis of the average Consumer Price Index for Industrial workers reaching 413.42 from 402.09 as on 31.12.2024 (Base 2016=100) and thereby resulting in an increase of 11.33 points. The revised Variable Dearness Allowance as under shall be payable from 01.10.2025;-

Rates of Variable Dearness Allowance for employees employed in employments in **Gypsum Mines, Barytes Mines, Bauxite Mines, Manganese Mines, China Clay Mines, Kyanite Mines, Copper Mines, Clay Mines, Magnesite Mines, White Clay Mines, Stone Mines, Steatite Mines (including the mines producing Soap Stones and Talc), Ochre Mines, Asbestos Mines, Fire Clay Mines, Chromite Mines, Quartzite Mines, Quartz Mines, Silica Mines, Graphite Mines, Felspar Mines, Laterite Mines, Dolomite Mines, Red Oxide Mines, Wolfram Mines Iron Ore Mines, Granite Mines, Rock Phosphate Mines, Hematite Mines, Marble and Calcite Mines, Uranium Mines, Mica Mines, Lignite Mines, Gravel Mines, Slate Mines and Magnetite Mines.**

Category of worker	Rates of V.D.A. (in Rs.) per day	
	For work above ground	For work below ground
Unskilled	191	237
Semi-Skilled/Unskilled Supervisory	237	282
Skilled/ Clerical	282	328
Highly Skilled	328	366

Therefore the minimum rates of wages showing the basic rates and Variable Dearness Allowance Payable w.e.f. 01.10.2025 will be as under:-

Category of worker	Rates of wages including V.D.A. (in Rs.) per day	
	For work above ground	For work below ground
Unskilled	350+191=541	437+237=674
Semi-Skilled/ Unskilled Supervisory	437+237=674	523+282=805
Skilled/ Clerical	523+282=805	610+328=938
Highly Skilled	610+328=938	683+366=1049

The VDA has been rounded off to the next higher rupee as per the decision of the Minimum Wages Advisory Board.

The classification of workers under different categories will be same as in Part-I of the notification, whereas classification of cities will be same as in the Part-II of the notification dated 19th January, 2017. The present classification of cities into areas A, B & C is enclosed at Annexure I for ready reference.

(Ashutosh A.T Pednekar)
Chief Labour Commissioner(C)

F.No.1/6(3)/2025-LS-II
Government of India
Ministry of Labour& Employment
Office of the Chief Labour Commissioner(C)
New Delhi

Dated: 25/09/2025

ORDER

In exercise of the powers conferred by Central Government vide Notification No. S.O. 188(E) dated **19th January, 2017** of the Ministry of Labour and Employment the undersigned hereby revise the rates of Variable Dearness Allowance on the basis of the average Consumer Price Index for Industrial workers reaching 413.42 from 402.09 as on 31.12.2024 (Base 2016=100) and thereby resulting in an increase of 11.33 points. The revised Variable Dearness Allowance as under shall be payable from 01.10.2025;-

The rates of Variable Dearness Allowance for employees employed in **CONSTRUCTION OR MAINTENANCE OF ROADS OR RUNWAYS OR IN BUILDING OPERATIONS INCLUDING LAYING DOWN UNDERGROUND ELECTRIC, WIRELESS, RADIO, TELEVISION, TELEPHONE,TELEGRAPH AND OVERSEAS COMMUNICATION CABLES AND SIMILAR OTHER UNDERGROUND CABLING WORK, ELECTRIC LINES, WATER SUPPLY LINES AND SEWERAGE PIPE LINES.**

Category of worker	Rates of V.D.A. Area wise per day (in Rupees)		
	A	B	C
Unskilled	282	237	191
Semi-Skilled/Unskilled Supervisory	314	266	222
Skilled/Clerical	344	314	266
Highly Skilled	372	344	314

Therefore the minimum rates of wages showing the basic rates and Variable Dearness Allowance payable w.e.f. 01.10.2025 will be as under :-

Category of worker	Rates of wages including V.D.A. per day (in Rupees)		
	A Area	B Area	C Area
Unskilled	523+282=805	437+237=674	350+191=541
Semi-Skilled/Unskilled Supervisory	579+314=893	494+266=760	410+222=632
Skilled/ Clerical	637+344=981	579+314=893	494+266=760
Highly Skilled	693+372=1065	637+344=981	579+314=893

The VDA has been rounded off to the next higher rupee as per the decision of the Minimum Wages Advisory Board.

The classification of workers under different categories will be same as in Part-I of the notification, whereas classification of cities will be same as in the Part-II of the notification dated 19th January, 2017. The present classification of cities into areas A, B & C is enclosed at Annexure I for ready reference.

(Ashutosh A.T Pednekar)
Chief Labour Commissioner(C)

F.No.1/6(4)/2025-LS-II
Government of India
Ministry of Labour& Employment
Office of the Chief Labour Commissioner(C)
New Delhi

Dated:25/09/2025

ORDER

In exercise of the powers conferred by Central Government vide Notification No. S.O. 192(E) dated **19th January, 2017** of the Ministry of Labour and Employment the undersigned hereby revise the rates of Variable Dearness Allowance on the basis of the average Consumer Price Index for Industrial workers reaching 413.42 from 402.09 as on 31.12.2024 (Base 2016=100) and thereby resulting in an increase of 11.33 points. The revised Variable Dearness Allowance as under shall be payable from 01.10.2025;-

Rates of VDA for employees employed in loading and unloading in **(i) Goods sheds, Parcel Offices of Railways, (ii) Other Goods-Sheds, Go-downs, Warehouses and other similar employments ; (iii) Docks and Ports; and (iv) Passengers and Goods and Cargo Carried out at Airports (both international and domestic).**

Therefore, the minimum rates of wages including the basic rates and Variable Dearness Allowance payable w.e.f. 01.10.2025 to the employees shall be as under:-

AREA	RATES OF V.D.A. PER DAY (IN RS.)
'A'	282
'B'	237
'C'	191

Therefore the minimum rates of wages showing the basic rates and variable Dearness Allowance payable w.e.f. 01.10.2025 shall be as under:-

AREA	RATES OF WAGES PLUS V.D. A. PER DAY				
	Basic Wages (Rs.)		V.D.A. (Rs.)		Total (Rs.)
'A'	523	+	282	=	805
'B'	437	+	237	=	674
'C'	350	+	191	=	541

The VDA has been rounded off to the next higher rupee as per the decision of the Minimum Wages Advisory Board.

The classification of workers under different categories will be same as in Part-I of the notification, whereas classification of cities will be same as in the Part-II of the notification dated 19th January, 2017. The present classification of cities into areas A, B & C is enclosed at Annexure I for ready reference.

(Ashutosh A. Pednekar)
Chief Labour Commissioner(C)

File. No.1/6(5)/2025-LS-II
Government of India
Ministry of Labour& Employment
Office of the Chief Labour Commissioner(C)
New Delhi

Dated: 25 /09/2025

ORDER

In exercise of the powers conferred by Central Government vide Notification No. S.O. 190(E) dated **19th January, 2017** of the Ministry of Labour and Employment the undersigned hereby revise the rates of Variable Dearness Allowance on the basis of the average Consumer Price Index for Industrial workers reaching 413.42 from 402.09 as on 31.12.2024 (Base 2016=100) and thereby resulting in an increase of 11.33 points. The revised Variable Dearness Allowance as under shall be payable from 01.10.2025;-

RATES OF V.D.A.FOR EMPLOYEES EMPLOYED IN "**Employment of Sweeping and Cleaning excluding activities prohibited under the Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993"**.

AREA	RATES OF V.D.A. PER DAY (in Rs.)
A	282
B	237
C	191

Therefore, the minimum rates of wages showing the basic rates and Variable Dearness Allowance payable w.e.f 01.10.2025 shall be as under:-

AREA	RATES OF WAGES PLUS V.D.A PER DAY				
	Basic Wages (Rs.)		V.D.A (Rs.)		Total (Rs.)
A	523	+	282	=	805
B	437	+	237	=	674
C	350	+	191	=	541

The VDA has been rounded off to the next higher rupee as per the decision of the Minimum Wages Advisory Board.

The classification of workers under different categories will be same as in Part-I of the notification, whereas classification of cities will be same as in the Part-II of the notification dated 19th January, 2017. The present classification of cities into areas A, B & C is enclosed at Annexure I for ready reference.

(Ashutosh A. Pednekar)
Chief Labour Commissioner(C)

File No.1/(6)/2025-LS-II
Government of India
Ministry of Labour& Employment
Office of the Chief Labour Commissioner(C)
New Delhi

Dated: 25/09/2025

ORDER

In exercise of the powers conferred by Central Government vide Notification No. S.O. 191(E) dated **19th January, 2017** of the Ministry of Labour and Employment the undersigned hereby revise the rates of Variable Dearness Allowance on the basis of the average Consumer Price Index for Industrial workers reaching 413.42 from 402.09 as on 31.12.2024 (Base 2016=100) and thereby resulting in an increase of 11.33 points. The revised Variable Dearness Allowance as under shall be payable from 01.10.2025;-

I. RATES OF VDA. for employees employed in **WATCH & WARD (without arms)** shall be as under:-

AREA	RATES OF V.D.A. PER DAY (in Rs.)
A	344
B	314
C	266

Therefore, the minimum rates of wages showing the basic rates and Variable Dearness Allowance payable w.e.f 01.10.2025 to employees employed in **WATCH AND WARD (without arms)** shall be as under:-

AREA	RATES OF WAGES PLUS V.D.A PER DAY				
	Basic Wages (Rs.)		V.D.A. (Rs.)		Total (Rs.)
A	637	+	344	=	981
B	579	+	314	=	893
C	494	+	266	=	760

II. RATES OF VDA for employees employed in **WATCH AND WARD (with arms)** shall be as under:-

AREA	RATES OF VDA PER DAY (in Rs.)
A	372
B	344
C	314

Therefore, the minimum rates of wages showing the basic rates and Variable Dearness Allowance payable w.e.f. 01.10.2025 to employees employed in **WATCH AND WARD (with arms)** shall be as under:-

AREA	RATES OF WAGES PLUS VDA PER DAY				
	Basic Wages (Rs.)		VDA. (Rs.)		Total (Rs.)
A	693	+	372	=	1065
B	637	+	344	=	981
C	579	+	314	=	893

The VDA has been rounded off to the next higher rupee as per the decision of the Minimum Wages Advisory Board.

The classification of workers under different categories will be same as in Part-I of the notification, whereas classification of cities will be same as in the Part-II of the notification dated 19th January, 2017. The present classification of cities into areas A, B & C is enclosed at Annexure I for ready reference.

(Ashutosh A. S Pednekar)
Chief Labour Commissioner(C)

File No.1/6(7)2025 LS-II
Government of India
Ministry of Labour& Employment
Office of the Chief Labour Commissioner(C)
New Delhi

Dated: 25/09/2025

ORDER

In exercise of the powers conferred by Central Government vide Notification No. S.O. 189(E) dated **19th January, 2017** of the Ministry of Labour and Employment the undersigned hereby revise the rates of Variable Dearness Allowance on the basis of the average Consumer Price Index for Industrial workers reaching 413.42 from 402.09 as on 31.12.2024 (Base 2016=100) and thereby resulting in an increase of 11.33 points. The revised Variable Dearness Allowance as under shall be payable from 01.10.2025;-

Rates of VDA for employees employed in "**STONE MINES**" shall be as under:-

Item of work	Rates of Variable Dearness Allowance as on 01.10.2025
1. Excavation & removal of over burden with 50 meters lead/ 1.5 meters lift. *	
(i) Soft Soil	Rs.194
(ii) Soft Soil with rock	Rs.287
(ii) Rock	Rs.380
2. Removal and stacking of rejected stones with 50 metres lead/ 1.5 Metres lift. *	Rs.155
3. Stone breaking or Stone Crushing for the Stone size of:-	
1.0 inch to 1.5 inches	Rs.1152
Above 1.5 inches to 3.0 inches	Rs.985
Above 3.0 inches to 5.0 inches	Rs.581
Above 5.0 inches	Rs.479

Therefore, the minimum piece rate wages showing the basic and Variable Dearness Allowance payable w.e.f. 01.10.2025 to the employees employed in Stone Mines shall be as under:-

Category	Basic Wages	VDA	Total
1. Excavation & removal of over burden with 50 meters Lead/1.5 Meters lift. *			
(i) Soft Soil	Rs.351 +	Rs.194 =	Rs. 545
(ii) Soft Soil with rock	Rs.531 +	Rs.287 =	Rs. 818
(iii) Rock	Rs.703 +	Rs.380 =	Rs.1083
2. Removal and stacking of rejected stones with 50 meters lead/ 1.5 meters lift. *	Rs. 283 +	Rs.155 =	Rs.438
3. Stone Breaking or Stone Crushing for stone size of category **	**Basic Wages**	**VDA**	**Total**
(i) 1.0 inch to 1.5 inches	Rs.2171 +	Rs1152 =	Rs.3323
(ii) Above 1.5 inches to 3.0 inches	Rs.1857 +	Rs.985 =	Rs.2842
(iii) Above 3.0 inches to 5.0 inches	Rs.1088 +	Rs.581 =	Rs.1669
(iv) Above 5.0 inches	Rs.893 +	Rs.479 =	Rs.1372

The workers employed on minimum guaranteed time rate of wages per day shall be entitled t o time rate of minimum wages plus special allowance, if any, for unskilled category of above ground workers revised from time to time by the Central Government in respect of schedule d employment in stone mines.

* Per 2.831 cube meters (100 cubic feet)

** Per truck load of 5.662 cubic meters (200 cubic feet)

(Ashutosh A.T Pednekar)
Chief Labour Commissioner(C)

फाइल संख्या 1/6(1)/2025 – एलएस-II

भारत सरकार

श्रम एवं रोजगार मंत्रालय

मुख्य श्रम आयुक्त (कें.) का कार्यालय

नई दिल्ली

दिनांक: 25.09.2025

आदेश

श्रम एवं रोजगार मंत्रालय के दिनांक 19 जनवरी, 2017 की अधिसूचना सं. एस.ओ. 186(ई) के अंतर्गत औद्योगिक कामगारों के लिए औसत उपभोक्ता मूल्य सूचकांक (वीडीए) के दिनांक 31.12.2024 (आधार वर्ष 2016=100) को 402.09 से 413.42 पर पहुँचने और इसके परिणामस्वरूप इसमें 11.33 अंकों की बढ़त होने के आधार पर केन्द्रीय सरकार द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए अधोहस्ताक्षरी ने एतद्द्वारा दिनांक 01.10.2025 से कृषि क्षेत्र में कार्यरत कर्मचारियों के लिए परिवर्ती महंगाई भत्ते की दरों में परिशोधन किया गया है। दिनांक 01.10.2025 से परिशोधित परिवर्ती महंगाई भत्ते की दरें इस प्रकार होंगी:-

कामगारों की श्रेणी	दैनिक क्षेत्रवार वी. डी. ए. की दरें (रुपये में)		
	'क'	'ख'	'ग'
अकुशल	181	167	165
अर्ध-कुशल/अकुशल पर्यवेक्षक	198	181	**168**
कुशल/ लिपिकीय	215	198	181
अति कुशल	237	221	198

अतः, कृषि क्षेत्र में कार्यरत कर्मचारियों के लिए दिनांक 01.10.2025 से देय मूल दर सहित भत्ते की न्यूनतम दर और परिवर्ती महंगाई भत्ता इस प्रकार होंगे:-

कामगारों की श्रेणी	वी .डी.ए.सहित मजदूरी की दरें क्षेत्रवार प्रतिदिन (रुपये में)		
	'क'	'ख'	'ग'
अकुशल	333+ 181=514	303+ 167=470	300+ 165=465
अर्ध-कुशलअकुशल पर्यवेक्षी/	364+ 198=562	335+ 181=516	307+ 168=475
कुशललिपिकीय/	395+ 215=610	364+ 198=562	334+ 181=515
अत्यधिक कुशल	438+237=675	407+221=628	364+ 198=562

न्यूनतम मजदूरी सलाहकार बोर्ड के निर्णय अनुसार वी.डी.ए. को अगले उच्चतर रुपये में पूर्णांकित किया जाता है।

विभिन्न वर्गों के तहत कर्मकारों का वर्गीकरण अधिसूचना के भाग-I में दिए अनुसार होगा, तथापि शहरों का वर्गीकरण दिनांक 19 जनवरी, 2017 को अधिसूचना के भाग-II में दिए अनुसार होगा। शहरों का वर्तमान वर्गीकरण क्षेत्र ए, बी तथा सी सुलभ संदर्भ हेतु अनुलग्नक-1 के रूप में संलग्न है।

(आशुतोष ए. टी. पेडणेकर)
मुख्य श्रमायुक्त (कें.)

फाइल संख्या 1/6(2)/2025 – एलएस-II

भारत सरकार

श्रम एवं रोजगार मंत्रालय

मुख्य श्रम आयुक्त (कें.) का कार्यालय

नई दिल्ली

दिनांक: 25.09.2025

आदेश

श्रम एवं रोजगार मंत्रालय के दिनांक 19 जनवरी, 2017 की अधिसूचना सं. एस.ओ. 2413 (ई) के अंतर्गत औद्योगिक कामगारों के लिए औसत उपभोक्ता मूल्य सूचकांक (वीडीए) के दिनांक 31.12.2024 (आधार वर्ष 2016=100) को 402.09 से 413.42 पर पहुँचने और इसके परिणामस्वरूप इसमें 11.33 अंकों की बढ़त होने के आधार पर केन्द्रीय सरकार द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए अधोहस्ताक्षरी ने एतद्द्वारा परिवर्ती महंगाई भत्ते की दरों में परिशोधन किया गया है। दिनांक 01.10.2025 से परिशोधित परिवर्ती महंगाई भत्ते की दरें इस प्रकार होंगी:-

जिप्सम खान, बैराइट खान, बॉक्साइट खान, मैंगनीज खान, चाइना क्ले खान, कायनाइट खान, तांबा खान, क्ले खान, मैग्नेसाइट खान, सफेद मिट्टी खान, पत्थर खान, स्टीटाइट खान (सोप स्टोन और टैल्क का उत्पादन करने वाली खानों सहित), गेरू खान, एस्बेस्टस खान, आग मिट्टी की खान, क्रोमाइट खान, क्वार्टजाइट खान, क्वार्ट्ज खान, सिलिका खान, ग्रेफाइट खान, फेलस्पार खान, लैटेराइट खान, डोलोमाइट खान, रेड ऑक्साइड खान, वोल्फराम खान, लौह अयस्क खान, ग्रेनाइट खान, रॉक फॉस्फेट खान, हेमेटाइट खान, संगमरमर और कैल्साइट खान, यूरेनियम खान, अभ्रक खान, लिग्नाइट खान, बजरी ब्लूज़, स्लेट खान और मैग्नेटाइट खान में कार्यरत कर्मचारियों के लिए परिवर्तनीय महंगाई भत्ते की दरें।

कर्मकारों की श्रेणी	क्षेत्रवार प्रति दिन परिवर्ती महंगाई भत्ते की दरें (रुपयों में)	
	भूमि से ऊपर कार्य के लिए	भूमि से नीचे कार्य के लिए
अकुशल	191	237
अर्ध-कुशल/अकुशल पर्यवेक्षक	237	282
कुशल/ लिपिकीय	282	328
अति कुशल	328	366

अतः, दिनांक 01.10.2025 से देय मूल दर और परिवर्ती महंगाई भत्ते को दर्शाती न्यूनतम मजदूरी की दरें निम्नानुसार होंगी:-

कर्मकारों की श्रेणी	क्षेत्रवार प्रति दिन परिवर्ती महंगाई भत्ते सहित मजदूरी की दरें (रुपयों में)	
	भूमि से ऊपर कार्य के लिए	भूमि से नीचे कार्य के लिए
अकुशल	350+191=541	437+237=674
अर्ध-कुशल/ अकुशल पर्यवेक्षक	437+237=674	523+282=805
कुशल/लिपिकीय	523+282=805	610+328=938
अति कुशल	610+328=938	683+366=1049

न्यूनतम मजदूरी सलाहकार बोर्ड के निर्णय अनुसार वी.डी.ए. को अगले उच्चतर रुपये में पूर्णांकित किया जाता है।

विभिन्न वर्गों के तहत कर्मकारों का वर्गीकरण अधिसूचना के भाग-I में दिए अनुसार होगा, तथापि शहरों का वर्गीकरण दिनांक 19 जनवरी, 2017 को अधिसूचना के भाग-II में दिए अनुसार होगा। शहरों का वर्तमान वर्गीकरण क्षेत्र ए, बी तथा सी सुलभ संदर्भ हेतु अनुलग्नक-1 के रूप में संलग्न है।

(आशुतोष ए. टी. पेडणेकर)
मुख्य श्रमायुक्त (कें.)

फाइल संख्या 1/6(3)/2025 – एलएस-II

भारत सरकार

श्रम एवं रोजगार मंत्रालय

मुख्य श्रम आयुक्त (कें.) का कार्यालय

नई दिल्ली

दिनांक: 25.09.2025

आदेश

श्रम एवं रोजगार मंत्रालय के दिनांक 19 जनवरी, 2017 की अधिसूचना सं. एस.ओ. 188(ई) के अंतर्गत औद्योगिक कामगारों के लिए औसत उपभोक्ता मूल्य सूचकांक (वीडीए) के दिनांक 31.12.2024 (आधार वर्ष 2016=100) को 402.09 से 413.42 पर पहुँचने और इसके परिणामस्वरूप इसमें 11.33 अंकों की बढ़त होने के आधार पर केन्द्रीय सरकार द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए अधोहस्ताक्षरी ने एतद्द्वारा परिवर्ती महंगाई भत्ते की दरों में परिशोधन किया गया है। दिनांक 01.10.2025 से परिशोधित परिवर्ती महंगाई भत्ते की दरें इस प्रकार होंगी:-

सड़कों या रनवे के निर्माण या रखरखाव या भूमिगत बिजली, वायरलेस, रेडियो, टेलीविजन, टेलीफोन, टेलीग्राफ और विदेशी संचार केबल और इसी तरह के अन्य भूमिगत केबलिंग कार्य, बिजली लाइनों, जल आपूर्ति लाइनों और पेय पाइप लाइनों सहित भवन निर्माण कार्यों में कार्यरत कर्मचारियों के लिए परिवर्तनीय महंगाई भत्ते की दरें।

कामगारों की श्रेणी	वी .डी.ए.की दरें क्षेत्रवार प्रतिदिन(रुपये में)		
	'क'	'ख'	'ग'
अकुशल	282	237	191
अर्ध-कुशल/अकुशल पर्यवेक्षक	314	266	222
कुशल/ लिपिकीय	344	314	266
अति कुशल	372	344	314

अतः, दिनांक 01.10.2025 से देय मूल दर और परिवर्ती महंगाई भत्ते को दर्शाती न्यूनतम मजदूरी की दरें निम्नानुसार होंगी:-

कामगारों की श्रेणी	वी .डी.ए.सहित मजदूरी की दरें प्रतिदिन (रुपये में)		
	'क' क्षेत्र	'ख' क्षेत्र	'ग' क्षेत्र
अकुशल	523+282=805	437+237=674	350+191=541
अर्ध-कुशलअकुशल पर्यवेक्षी/	579+314=893	494+266=760	410+222=632
कुशललिपिकीय/	637+344=981	579+314=893	494+266=760
अत्यधिक कुशल	693+372=1065	637+344=981	579+314=893

न्यूनतम मजदूरी सलाहकार बोर्ड के निर्णय अनुसार वी.डी.ए. को अगले उच्चतर रुपये में पूर्णांकित किया जाता है।

विभिन्न वर्गों के तहत कर्मकारों का वर्गीकरण अधिसूचना के भाग-I में दिए अनुसार होगा, तथापि शहरों का वर्गीकरण दिनांक 19 जनवरी, 2017 को अधिसूचना के भाग-II में दिए अनुसार होगा। शहरों का वर्तमान वर्गीकरण क्षेत्र ए, बी तथा सी सुलभ संदर्भ हेतु अनुलग्नक-1 के रूप में संलग्न है।

(आशुतोष ए. टी. पेडणेकर)

मुख्य श्रमायुक्त (कें.)

फाइल संख्या 1/6(4)/2025 – एलएस-II

भारत सरकार

श्रम एवं रोजगार मंत्रालय

मुख्य श्रम आयुक्त (कें.) का कार्यालय

नई दिल्ली

दिनांक: 25.09.2025

आदेश

श्रम एवं रोजगार मंत्रालय के दिनांक 19 जनवरी, 2017 की अधिसूचना सं. एस.ओ. 192(ई) के अंतर्गत औद्योगिक कामगारों के लिए औसत उपभोक्ता मूल्य सूचकांक (वीडीए) के दिनांक 31.12.2024 (आधार वर्ष 2016=100) को 402.09 से 413.42 पर पहुँचने और इसके परिणामस्वरूप इसमें 11.33 अंकों की बढ़त होने के आधार पर केन्द्रीय सरकार द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए अधोहस्ताक्षरी ने एतद्द्वारा परिवर्ती महंगाई भत्ते की दरों में परिशोधन किया गया है। दिनांक 01.10.2025 से परिशोधित परिवर्ती महंगाई भत्ते की दरें इस प्रकार होंगी:-

गुड्स शेड, रेलवे के पार्सल कार्यालय, (ii) अन्य गुड्स-शेड, गो-डाउन, गोदाम और अन्य समान रोजगार में लोडिंग और अनलोडिंग में कार्यरत कर्मचारियों के लिए वी.डी.ए. की दरें; (iii) डॉक एवं पोर्ट्स और (iv) हवाई अड्डों (अंतर्राष्ट्रीय और घरेलू दोनों) पर यात्रियों और माल और कार्गो की ढुलाई में कार्यरत कर्मचारियों के लिए वी.डी.ए. की दरें।

अंत:, दिनांक 01.10.2025 से कर्मचारियों को देय मूल दर और परिवर्ती महंगाई भत्ते सहित न्यूनतम मजदूरी की दरें निम्नानुसार होंगी:-

क्षेत्र	प्रतिदिन महगाई की दरें (रु. में)
"क"	282
"ख"	237
"ग"	191

अत:, दिनांक 01.10.2025 से देय मूल दर और परिवर्ती महंगाई भत्ते को दर्शाती न्यूनतम मजदूरी की दरें निम्नानुसार होंगी:-

क्षेत्र	प्रति दिन परिवर्तनीय मंहगाई भत्ते सहित मजदूरी की दरें (रुपयों में)			
	मूल मजदूरी (रुपए)	परिवर्तनीय महंगाई भत्ता (रुपए)		कुल (रुपए)
क	523	+ 282	=	805
ख	437	+ 237	=	674
ग	350	+ 191	=	541

न्यूनतम मजदूरी सलाहकार बोर्ड के निर्णय अनुसार वी.डी.ए. को अगले उच्चतर रुपये में पूर्णांकित किया जाता है।

विभिन्न वर्गों के तहत कर्मकारों का वर्गीकरण अधिसूचना के भाग-I में दिए अनुसार होगा, तथापि शहरों का वर्गीकरण दिनांक 19 जनवरी, 2017 को अधिसूचना के भाग-II में दिए अनुसार होगा। शहरों का वर्तमान वर्गीकरण क्षेत्र ए, बी तथा सी सुलभ संदर्भ हेतु अनुलग्नक-1 के रूप में संलग्न है।

(आशुतोष ए. टी. पेडणेकर)
मुख्य श्रमायुक्त (कें.)

सं. 1/6(5)/2025-एलएस II

भारत सरकार

श्रम एवं रोजगार मंत्रालय

मुख्य श्रमायुक्त (केन्द्रीय) कार्यालय

नई दिल्ली

दिनांक: 25/09/2025

आदेश

श्रम एवं रोजगार मंत्रालय के दिनांक 19 जनवरी, 2017 की अधिसूचना सं. एस.ओ. 190(ई) के अंतर्गत औद्योगिक कामगारों के लिए औसत उपभोक्ता मूल्य सूचकांक (वीडीए) के दिनांक 31.12.2024 (आधार वर्ष 2016=100) को 402.09 से 413.42 पर पहुँचने और इसके परिणामस्वरूप इसमें 11.33 अंकों की बढ़ोतरी होने के आधार पर केन्द्रीय सरकार द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए अधोहस्ताक्षरी ने एतद्द्वारा परिवर्ती महंगाई भत्ते की दरों में परिशोधन किया है। दिनांक 01.10.2025 से परिशोधित परिवर्ती महंगाई भत्ते की दरें इस प्रकार होंगी:-

सफाई कर्मचारी नियोजन और शुष्क शौचालय सन्निर्माण (प्रतिषेध) अधिनियम, 1993 के अंतर्गत निषेध क्रियाकलापों के अलावा झाड़ू लगाने और सफाई करने के नियोजन में कार्यरत कर्मचारियों हेतु वी.डी.ए. की दरें

क्षेत्र	दैनिक वी.डी.ए. की दरें (रुपयों में)
ए	282
बी	237
सी	191

अतः दिनांक 01.10.2025 से देय मूल दर और परिवर्ती महंगाई भत्ते को दर्शाती न्यूनतम मजदूरी की दरें निम्नानुसार होंगी:-

क्षेत्र	दैनिक आधार पर मजदूरी दर+ वी.डी.ए.				
	मूल मजदूरी (रुपयों में)		वी.डी.ए. (रुपयों में)		कुल (रुपयों में)
ए	523	+	282	=	805
बी	437	+	237	=	674
सी	350	+	191	=	541

न्यूनतम मजदूरी सलाहकार बोर्ड के निर्णय के अनुसार वी.डी.ए. को अगले उच्चतर रुपये में पूर्णांकित किया गया है।

विभिन्न वर्गों के अंतर्गत कामगारों का वर्गीकरण अधिसूचना के भाग-I में दिए अनुसार होगा, जबकि शहरों का वर्गीकरण दिनांक 19 जनवरी, 2017 की अधिसूचना के भाग-II में दिए अनुसार होगा। शहरों का वर्तमान वर्गीकरण क्षेत्र ए, बी एवं सी सुलभ संदर्भ हेतु अनुलग्नक-I के रूप में संलग्न है।

(आशुतोष ए. टी. पेडणेकर)
मुख्य श्रमायुक्त (कें.)

सं. 1/6(6)/2024-एलएस ॥

भारत सरकार

श्रम एवं रोजगार मंत्रालय

मुख्य श्रमायुक्त (केन्द्रीय) कार्यालय

नई दिल्ली

दिनांक: 25/09/2025

आदेश

श्रम एवं रोजगार मंत्रालय के दिनांक 19 जनवरी, 2017 की अधिसूचना सं. एस.ओ. 191(ई) के अंतर्गत औद्योगिक कामगारों के लिए औसत उपभोक्ता मूल्य सूचकांक (वीडीए) के दिनांक 31.12.2024 (आधार वर्ष 2016=100) को 402.09 से 413.42 पर पहुँचने और इसके परिणामस्वरूप इसमें 11.33 अंकों की बढ़त होने के आधार पर केन्द्रीय सरकार द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए अधोहस्ताक्षरी ने एतद्द्वारा परिवर्ती महंगाई भत्ते की दरों में परिशोधन किया गया है। दिनांक 01.10.2025 से परिशोधित परिवर्ती महंगाई भत्ते की दरें इस प्रकार होंगी:-

I. वीडीए की दरें, निगरानी और देखभाल (बिना आर्म्स के) में कार्यरत कर्मचारियों के लिए निम्नानुसार होंगी:-

क्षेत्र	दैनिक वी.डी.ए. की दरें (रुपयों में)
ए	344
बी	314
सी	266

अतः दिनांक 01.10.2025 से देय मूल दर और परिवर्ती महंगाई भत्ते को दर्शाती न्यूनतम मजदूरी की दरें निगरानी और देखभाल (बिना आर्म्स के) में कार्यरत कर्मचारियों के लिए निम्नानुसार होंगी:-

क्षेत्र	दैनिक आधार पर मजदूरी दर+ वी.डी.ए.				
	मूल मजदूरी		वी.डी.ए (रुपयों में).		कुल (रुपयों में)
ए	637	+	344	=	981
बी	579	+	314	=	893
सी	494	+	266	=	760

II. वीडीए की दरें, निगरानी और देखभाल (आर्म्स के साथ) में कार्यरत कर्मचारियों के लिए निम्नानुसार होंगी:-

क्षेत्र	दैनिक वी.डी.ए. की दरें (रुपयों में)
ए	372
बी	344
सी	314

अतः दिनांक 01.10.2025 से देय मूल दर और परिवर्ती महंगाई भत्ते को दर्शाती न्यूनतम मजदूरी की दरें निगरानी और देखभाल (आर्म्स के साथ) में कार्यरत कर्मचारियों के लिए निम्नानुसार होंगी:-

क्षेत्र	दैनिक आधार पर मजदूरी दर+ वी.डी.ए.				
	मूल मजदूरी		वी.डी.ए (रुपयों में).		कुल (रुपयों में)
ए	693	+	372	=	1065
बी	637	+	344	=	981
सी	579	+	314	=	893

न्यूनतम मजदूरी सलाहकार बोर्ड के निर्णय के अनुसार वी.डी.ए. को अगले उच्चतर रुपये में पूर्णांकित किया गया है।

विभिन्न वर्गों के अंतर्गत कामगारों का वर्गीकरण अधिसूचना के भाग-I में दिए अनुसार होगा, जबकि शहरों का वर्गीकरण दिनांक 19 जनवरी, 2017 की अधिसूचना के भाग-II में दिए अनुसार होगा। शहरों का वर्तमान वर्गीकरण क्षेत्र ए, बी एवं सी सुलभ संदर्भ हेतु अनुलग्नक-I के रूप में संलग्न है।

(आशुतोष ए. टी. पेडणेकर)
मुख्य श्रमायुक्त (कें.)

सं. 1/6(7)/2025-एलएस II

भारत सरकार

श्रम एवं रोजगार मंत्रालय

मुख्य श्रमायुक्त (केन्द्रीय) कार्यालय

नई दिल्ली

दिनांक: 25/09/2025

आदेश

श्रम एवं रोजगार मंत्रालय के दिनांक 19 जनवरी, 2017 की अधिसूचना सं. एस.ओ. 189(ई) के अंतर्गत औद्योगिक कामगारों के लिए औसत उपभोक्ता मूल्य सूचकांक (वीडीए) के दिनांक 31.12.2024 (आधार वर्ष 2016=100) को 402.09 से 413.42 पर पहुँचने और इसके परिणामस्वरूप इसमें 11.33 अंकों की बढ़त होने के आधार पर केन्द्रीय सरकार द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए अधोहस्ताक्षरी ने एतद्द्वारा परिवर्ती महंगाई भत्ते की दरों में परिशोधन किया गया है। परिशोधित परिवर्ती महंगाई भत्ता दिनांक 01.10.2025 से निम्नानुसार देय होगा:-

"पत्थर खानों" में कार्यरत कर्मचारियों हेतु वी.डी.ए. की दरें निम्नानुसार हैं:-

कार्य विवरण	दिनांक 01.10.2025 से परिवर्ती महंगाई भत्ते की दरें
1. 50 मीटर लीड/1.5 मीटर लिफ्ट के साथ अतिरिक्त भार की खुदाई व निष्कासन	
(i) नर्म मिट्टी	रु. 194
(ii) चट्टान सहित नर्म मिट्टी	रु. 287
(iii) चट्टान	रु. 380
2. 50 मीटर लीड/1.5 मीटर लिफ्ट के साथ अस्वीकृत पत्थरों का निष्कासन व ढेर लगाना	रु. 155
3. निम्नलिखित आकार के पत्थर हेतु पत्थर तोड़ना या पत्थर पेराई:-	
1.0 इंच से 1.5 इंच तक	रु. 1152
1.5 इंच के ऊपर से 3.0 इंच तक	रु. 985
3.0 इंच के ऊपर से 5.0 इंच तक	रु. 581
5.0 इंच के ऊपर	रु. 479

अतः दिनांक 01.10.2025 से देय मूल दर और परिवर्ती महंगाई भत्ते को दर्शाती न्यूनतम मजदूरी की दरें पत्थर खानों में कार्यरत कर्मचारियों के लिए निम्नानुसार होंगी:-

श्रेणी	मूल मजदूरी		वीडीए		कुल
1. 50 मीटर लीड/1.5 मीटर लिफ्ट के साथ अतिरिक्त भार की खुदाई व निष्कासन					
(i) नर्म मिट्टी	रु. 351	+	रु. 194	=	रु. 545
(ii) चट्टान सहित नर्म मिट्टी	रु. 531	+	रु. 287	=	रु. 818
(iii) चट्टान	रु. 703	+	रु. 380	=	रु. 1083
2. 50 मीटर लीड/1.5 मीटर लिफ्ट के साथ अस्वीकृत पत्थरों का निष्कासन व ढेर लगाना	रु. 283	+	रु. 155	=	रु. 438
3. निम्नलिखित आकार के पत्थर हेतु पत्थर तोड़ना या पत्थर पेराई:-	**मूल मजदूरी**		**वीडीए**		**कुल**
(i) 1.0 इंच से 1.5 इंच तक	रु. 2171	+	रु. 1152	=	रु. 3323
(ii) 1.5 इंच के ऊपर से 3.0 इंच तक	रु. 1857	+	रु. 985	=	रु. 2842
(iii) 3.0 इंच के ऊपर से 5.0 इंच तक	रु. 1088	+	रु. 581	=	रु. 1669
(iv) 5.0 इंच के ऊपर	रु. 893	+	रु. 479	=	रु. 1372

दैनिक मजदूरी की न्यूनतम गारंटीकृत समय दर पर कार्यरत कामगार पत्थर खानों में अनुसूचित नियोजन के संबंध में केन्द्रीय सरकार द्वारा समय-समय पर सतह के ऊपर काम करने वाले कामगारों के अकुशल वर्ग हेतु विशिष्ट भत्ते, यदि कोई है तो, के साथ न्यूनतम मजदूरी के समय दर के हकदार होंगे।

* प्रति 2.831 घन मीटर (100 घन फीट)

** 5.662 घन मीटर प्रति ट्रक भार (200 घन फीट)

(आशुतोष ए. टी. पेडणेकर)
मुख्य श्रमायुक्त (कें.)

ANNEXURE-24
Submission by GHIAL - CPI Apr 20

No. 19: Other Consumer Price Indices

ANNEXURE-24

Item	Base Year	Linking Factor	2019-20	2019	2020	
				Apr.	Mar.	Apr.
	1	2	3	4	5	6
1 Consumer Price Index for Industrial Workers	2001	4.63	323	312	326	329
2 Consumer Price Index for Agricultural Labourers	1986-87	5.89	980	932	1007	1014
3 Consumer Price Index for Rural Labourers	1986-87	–	986	939	1013	1019

Source: Labour Bureau, Ministry of Labour and Employment, Government of India.

ANNEXURE-25
Submission by GHIAL - CPI Nov 25

No. 20: Other Consumer Price Indices

ANNEXURE-25

Item	Base Year	Linking Factor	2024-25	2024	2025	
				Nov.	Oct.	Nov.
	1	2	3	4	5	6
1 Consumer Price Index for Industrial Workers	2016	2.88	142.6	144.5	147.7	148.2
2 Consumer Price Index for Agricultural Labourers	2019	9.69	-	138.3	136.4	137.4
3 Consumer Price Index for Rural Labourers	2019	9.78	-	137.9	136.5	137.3

Source: Labour Bureau, Ministry of Labour and Employment, Government of India.
CPI-AL and RL indices for 2024 (Base Year 2019) are calculated using the published inflation rates.

ANNEXURE-26
Submission by GHIAL - Index for Infrastructure industries

TABLE 30 : INDEX NUMBERS OF INFRASTRUCTURE INDUSTRIES

Base Year : 1993-94 = 100

Year	**Overall Index**	Electricity	Coal	Finished Steel	Cement	Crude Petroleum	Petroleum Refinery Products
1	**2**	3	4	5	6	7	8
Weight	**26.68**	**10.17**	**3.22**	**5.13**	**1.99**	**4.17**	**2.00**
1998-99	**138.3**	138.6	117.8	162.8	153.4	121.1	128.4
1999-00	**150.9**	148.6	121.6	187.3	175.2	118.2	161.0
2000-01	**158.6**	154.4	125.9	199.3	173.6	120.0	193.8
2001-02	**163.7**	159.3	131.2	206.4	186.5	118.5	201.0
2002-03	**171.9**	164.3	137.2	221.5	203.0	122.6	210.9
2003-04	**182.4**	172.6	144.2	243.1	215.3	123.5	228.3
2004-05	**193.0**	181.6	153.1	263.5	229.5	125.8	238.1

Base Year : 2004-05 = 100

Year	**Overall Index**	Electricity	Coal	Steel	Cement	Crude Oil	Refinery Products	Natural Gas	Fertilisers
1	**2**	3	4	5	6	7	8	9	10
Weight	**37.90**	**10.32**	**4.38**	**6.68**	**2.41**	**5.22**	**5.94**	**1.71**	**1.25**
2005-06	**103.9**	105.1	106.6	107.0	112.3	94.7	102.2	101.4	100.6
2006-07	**112.6**	112.8	112.9	120.7	122.6	100.0	115.3	99.9	103.8
2007-08	**118.5**	119.9	119.9	128.9	132.5	100.4	122.8	102.1	95.5
2008-09	**121.8**	123.2	129.5	131.4	142.1	98.6	126.5	103.4	91.8
2009-10	**129.9**	130.8	140.0	139.3	157.1	99.1	125.9	149.5	103.4
2010-11	**138.4**	138.1	139.7	157.7	164.2	111.0	129.7	164.4	103.4
2011-12	**145.3**	149.3	141.5	174.0	175.2	112.1	133.7	149.8	103.8
2012-13	**154.7**	155.3	148.1	181.1	188.7	111.4	172.4	128.1	100.2
2013-14	**161.2**	164.6	150.0	201.9	194.5	111.2	175.0	111.5	101.8
2014-15	**168.5**	178.5	162.2	211.4	205.3	110.2	175.6	106.0	101.7
2015-16	**175.2**	193.4	169.5	211.3	215.5	108.7	183.2	101.6	114.4

Base Year : 2011-12 = 100

Year	**Overall Index**	Electricity	Coal	Steel	Cement	Crude Oil	Petroleum Refinery Products	Natural Gas	Fertilisers
1	**2**	3	4	5	6	7	8	9	10
Weight	**40.27**	**7.99**	**4.16**	**7.22**	**2.16**	**3.62**	**11.29**	**2.77**	**1.06**
2012-13	**103.8**	104.0	103.2	107.9	107.5	99.4	107.2	85.6	96.7
2013-14	**106.5**	110.3	104.2	115.8	111.5	99.2	108.6	74.5	98.1
2014-15	**111.7**	126.6	112.6	121.7	118.1	98.4	108.8	70.5	99.4
2015-16	**115.1**	133.8	118.0	120.2	123.5	97.0	114.1	67.2	106.4
2016-17	**120.5**	141.6	121.8	133.1	122.0	94.5	119.7	66.5	106.6
2017-18	**125.7**	149.2	124.9	140.5	129.7	93.7	125.2	68.4	106.6
2018-19	**131.2**	156.9	134.1	147.7	147.0	89.8	129.1	69.0	107.0
2019-20	**131.6**	158.4	133.6	152.6	145.7	84.5	129.4	65.1	109.8
2020-21	**123.2**	157.6	131.1	139.4	130.0	80.1	114.9	59.8	111.6
2021-22	**136.1**	170.1	142.3	163.0	156.9	77.9	125.1	71.3	112.4
2022-23	**146.7**	185.2	163.5	178.1	170.6	76.6	131.2	72.4	125.1
2023-24	**157.8**	198.3	182.7	200.4	185.7	77.1	135.9	76.8	129.8
2024-25	**164.9**	208.6	192.0	214.1	197.4	75.4	139.7	75.9	133.5

Notes : 1. Weights represent weight of Index Number of Industrial Production.
2. Refinery Products has 93 per cent of the crude throughout.
3. Refinery Products' yearly growth rate of 2012-13 is not comparable with other years on account of inclusion of RIL (SEZ) production data since April, 2012

Also see Notes on Tables**.**

Source : Ministry of Commerce and Industry, Government of India for base 1993-94 = 100, base 2004-05 = 100 and base 2011-12 = 100.

ANNEXURE-27
Submission by GHIAL - WPI Apr 20

No. 21: Wholesale Price Index

(Base: 2011-12 = 100)

Commodities	Weight	2019-20	2019	2020		
			Jun.	Apr.	May (P)	Jun. (P)
	1	2	3	4	5	6
1 ALL COMMODITIES	**100.000**	**121.8**	**121.5**	**119.2**	**117.7**	**119.3**
1.1 PRIMARY ARTICLES	**22.618**	**143.3**	**141.0**	**137.8**	**136.2**	**139.3**
1.1.1 FOOD ARTICLES	**15.256**	**155.8**	**152.2**	**154.5**	**152.3**	**155.3**
1.1.1.1 Food Grains (Cereals+Pulses)	3.462	159.6	155.4	161.8	160.0	161.6
1.1.1.2 Fruits & Vegetables	3.475	174.7	166.8	161.4	152.3	159.3
1.1.1.3 Milk	4.440	146.7	145.5	151.6	151.2	151.4
1.1.1.4 Eggs,Meat & Fish	2.402	147.0	146.0	146.2	147.1	152.5
1.1.1.5 Condiments & Spices	0.529	143.9	133.9	147.1	147.3	145.6
1.1.1.6 Other Food Articles	0.948	144.0	144.2	141.8	146.2	147.8
1.1.2 NON-FOOD ARTICLES	**4.119**	**128.7**	**128.7**	**123.9**	**123.0**	**125.1**
1.1.2.1 Fibres	0.839	128.2	133.9	121.4	119.6	117.2
1.1.2.2 Oil Seeds	1.115	151.4	150.0	150.6	153.4	154.8
1.1.2.3 Other non-food Articles	1.960	104.8	106.1	105.0	103.8	103.8
1.1.2.4 Floriculture	0.204	238.0	208.3	169.9	156.2	200.5
1.1.3 MINERALS	**0.833**	**154.5**	**153.4**	**154.1**	**156.8**	**154.1**
1.1.3.1 Metallic Minerals	0.648	147.4	146.8	145.1	148.0	145.1
1.1.3.2 Other Minerals	0.185	179.0	176.6	185.7	187.7	185.7
1.1.4 CRUDE PETROLEUM & NATURAL GAS	**2.410**	**85.3**	**87.2**	**49.9**	**49.7**	**57.8**
1.2 FUEL & POWER	**13.152**	**102.2**	**102.2**	**89.8**	**83.7**	**88.3**
1.2.1 COAL	**2.138**	**125.3**	**124.0**	**126.5**	**126.5**	**126.5**
1.2.1.1 Coking Coal	0.647	138.1	133.9	141.9	141.9	141.9
1.2.1.2 Non-Coking Coal	1.401	119.0	119.0	119.0	119.0	119.0
1.2.1.3 Lignite	0.090	129.1	129.9	131.1	131.1	131.1
1.2.2 MINERAL OILS	**7.950**	**92.3**	**94.0**	**70.6**	**60.6**	**68.2**
1.2.3 ELECTRICITY	**3.064**	**111.8**	**108.3**	**113.9**	**113.9**	**113.9**
1.3 MANUFACTURED PRODUCTS	**64.231**	**118.3**	**118.5**	**118.7**	**118.1**	**118.6**
1.3.1 MANUFACTURE OF FOOD PRODUCTS	**9.122**	**133.9**	**130.8**	**136.3**	**135.7**	**137.4**
1.3.1.1 Processing and Preserving of meat	0.134	137.5	140.5	136.2	135.6	135.2
1.3.1.2 Processing and Preserving of fish, Crustaceans, Molluscs and products thereof	0.204	136.1	132.3	132.0	139.3	139.2
1.3.1.3 Processing and Preserving of fruit and Vegetables	0.138	114.3	115.6	116.2	115.6	119.4
1.3.1.4 Vegetable and Animal oils and Fats	2.643	119.3	112.4	126.4	126.2	128.0
1.3.1.5 Dairy products	1.165	145.0	139.8	151.1	148.4	148.8
1.3.1.6 Grain mill products	2.010	146.3	145.0	146.4	145.6	145.7
1.3.1.7 Starches and Starch products	0.110	135.5	136.0	127.0	124.0	117.5
1.3.1.8 Bakery products	0.215	133.5	132.2	136.6	136.4	137.2
1.3.1.9 Sugar, Molasses & honey	1.163	118.3	117.3	118.4	117.3	119.0
1.3.1.10 Cocoa, Chocolate and Sugar confectionery	0.175	127.2	128.4	127.8	127.3	128.0
1.3.1.11 Macaroni, Noodles, Couscous and Similar farinaceous products	0.026	132.7	133.7	126.3	133.8	142.0
1.3.1.12 Tea & Coffee products	0.371	139.7	145.8	138.1	139.8	160.7
1.3.1.13 Processed condiments & salt	0.163	132.4	124.8	144.0	144.1	141.6
1.3.1.14 Processed ready to eat food	0.024	128.7	131.6	133.1	129.4	134.0
1.3.1.15 Health supplements	0.225	159.9	154.5	151.3	146.7	146.8
1.3.1.16 Prepared animal feeds	0.356	173.6	172.1	166.1	167.8	167.6
1.3.2 MANUFACTURE OF BEVERAGES	**0.909**	**123.6**	**123.3**	**125.0**	**124.8**	**124.6**
1.3.2.1 Wines & spirits	0.408	117.8	116.4	119.8	119.9	119.7
1.3.2.2 Malt liquors and Malt	0.225	125.7	124.8	127.6	127.4	127.7
1.3.2.3 Soft drinks; Production of mineral waters and Other bottled waters	0.275	130.5	132.5	130.7	130.1	129.3
1.3.3 MANUFACTURE OF TOBACCO PRODUCTS	**0.514**	**153.4**	**154.0**	**156.4**	**160.6**	**158.0**
1.3.3.1 Tobacco products	0.514	153.4	154.0	156.4	160.6	158.0

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2019-20	2019	2020		
			Jun.	Apr.	May (P)	Jun. (P)
1.3.4 MANUFACTURE OF TEXTILES	**4.881**	**117.7**	**119.4**	**117.0**	**116.3**	**114.9**
1.3.4.1 Preparation and Spinning of textile fibres	2.582	107.9	110.7	105.7	104.4	102.0
1.3.4.2 Weaving & Finishing of textiles	1.509	130.1	130.7	131.5	130.8	130.2
1.3.4.3 Knitted and Crocheted fabrics	0.193	114.5	115.0	113.1	114.2	116.9
1.3.4.4 Made-up textile articles, Except apparel	0.299	134.5	135.2	133.0	133.7	133.8
1.3.4.5 Cordage, Rope, Twine and Netting	0.098	143.1	139.4	147.3	148.7	148.9
1.3.4.6 Other textiles	0.201	116.8	118.2	117.3	119.4	118.4
1.3.5 MANUFACTURE OF WEARING APPAREL	**0.814**	**138.3**	**138.0**	**138.9**	**138.5**	**139.1**
1.3.5.1 Manufacture of Wearing Apparel (woven), Except fur Apparel	0.593	139.2	139.3	139.0	139.4	139.5
1.3.5.2 Knitted and Crocheted apparel	0.221	135.9	134.6	138.6	136.4	138.0
1.3.6 MANUFACTURE OF LEATHER AND RELATED PRODUCTS	**0.535**	**118.6**	**118.6**	**117.7**	**117.8**	**116.7**
1.3.6.1 Tanning and Dressing of leather; Dressing and Dyeing of fur	0.142	105.5	106.2	104.1	104.5	101.0
1.3.6.2 Luggage, HandbAgs, Saddlery and Harness	0.075	136.3	136.4	138.3	138.4	139.0
1.3.6.3 Footwear	0.318	120.3	120.0	119.0	118.9	118.5
1.3.7 MANUFACTURE OF WOOD AND PRODUCTS OF WOOD AND CORK	**0.772**	**133.7**	**134.5**	**132.6**	**133.4**	**132.9**
1.3.7.1 Saw milling and Planing of wood	0.124	122.2	126.2	119.8	120.6	119.6
1.3.7.2 Veneer sheets; Manufacture of plywood, Laminboard, Particle board and Other panels and Boards	0.493	135.5	134.9	134.8	135.9	135.4
1.3.7.3 Builder's carpentry and Joinery	0.036	176.2	175.5	177.3	177.6	179.8
1.3.7.4 Wooden containers	0.119	125.7	129.2	123.4	123.1	122.5
1.3.8 MANUFACTURE OF PAPER AND PAPER PRODUCTS	**1.113**	**121.1**	**122.5**	**120.6**	**120.9**	**120.5**
1.3.8.1 Pulp, Paper and Paperboard	0.493	125.0	127.2	123.5	124.6	123.3
1.3.8.2 Corrugated paper and Paperboard and Containers of paper and Paperboard	0.314	115.0	115.1	116.6	116.3	117.4
1.3.8.3 Other articles of paper and Paperboard	0.306	121.2	122.6	120.0	119.6	119.3
1.3.9 PRINTING AND REPRODUCTION OF RECORDED MEDIA	**0.676**	**150.6**	**148.0**	**150.8**	**149.0**	**151.7**
1.3.9.1 Printing	0.676	150.6	148.0	150.8	149.0	151.7
1.3.10 MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS	**6.465**	**117.5**	**119.0**	**115.2**	**115.1**	**115.8**
1.3.10.1 Basic chemicals	1.433	119.9	123.4	115.4	115.2	115.3
1.3.10.2 Fertilizers and Nitrogen compounds	1.485	123.1	123.4	123.4	123.8	123.7
1.3.10.3 Plastic and Synthetic rubber in primary form	1.001	112.4	114.5	106.2	106.5	108.8
1.3.10.4 Pesticides and Other agrochemical products	0.454	122.6	121.9	120.3	121.0	123.1
1.3.10.5 Paints, Varnishes and Similar coatings, Printing ink and Mastics	0.491	114.7	116.4	113.2	113.3	113.9
1.3.10.6 Soap and Detergents, Cleaning and Polishing preparations, Perfumes and Toilet preparations	0.612	118.6	119.5	118.0	116.2	119.3
1.3.10.7 Other chemical products	0.692	114.2	114.6	114.6	114.7	114.4
1.3.10.8 Man-made fibres	0.296	97.9	100.3	95.4	93.3	91.1
1.3.11 MANUFACTURE OF PHARMACEUTICALS, MEDICINAL CHEMICAL AND BOTANICAL PRODUCTS	**1.993**	**127.3**	**125.7**	**130.3**	**130.2**	**130.8**
1.3.11.1 Pharmaceuticals, Medicinal chemical and Botanical products	1.993	127.3	125.7	130.3	130.2	130.8
1.3.12 MANUFACTURE OF RUBBER AND PLASTICS PRODUCTS	**2.299**	**108.5**	**109.3**	**107.3**	**107.3**	**107.9**
1.3.12.1 Rubber Tyres and Tubes; Retreading and Rebuilding of Rubber Tyres	0.609	98.9	99.3	98.1	98.7	97.8
1.3.12.2 Other Rubber Products	0.272	93.5	94.2	92.8	93.7	93.1
1.3.12.3 Plastics products	1.418	115.4	116.5	114.1	113.7	115.1
1.3.13 MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS	**3.202**	**116.7**	**118.3**	**117.8**	**117.5**	**118.0**
1.3.13.1 Glass and Glass products	0.295	124.5	125.7	122.4	121.6	125.6
1.3.13.2 Refractory products	0.223	108.7	109.4	107.3	107.3	109.0
1.3.13.3 Clay Building Materials	0.121	102.8	100.7	107.7	106.2	110.1
1.3.13.4 Other Porcelain and Ceramic Products	0.222	113.9	114.5	111.8	109.4	109.2
1.3.13.5 Cement, Lime and Plaster	1.645	119.5	121.8	122.6	122.7	122.5

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2019-20	2019	2020		
			Jun.	Apr.	May (P)	Jun. (P)
1.3.13.6 Articles of Concrete, Cement and Plaster	0.292	121.6	121.0	123.0	124.7	124.8
1.3.13.7 Cutting, Shaping and Finishing of Stone	0.234	120.2	119.7	121.5	119.1	118.7
1.3.13.8 Other Non-Metallic Mineral Products	0.169	86.6	94.6	77.6	77.6	77.6
1.3.14 MANUFACTURE OF BASIC METALS	**9.646**	**106.2**	**108.7**	**107.0**	**103.2**	**103.9**
1.3.14.1 Inputs into steel making	1.411	100.6	105.0	113.1	96.4	97.0
1.3.14.2 Metallic Iron	0.653	107.7	113.5	111.1	100.3	102.1
1.3.14.3 Mild Steel - Semi Finished Steel	1.274	95.1	96.2	96.3	95.0	94.7
1.3.14.4 Mild Steel -Long Products	1.081	105.5	108.4	106.2	105.3	104.6
1.3.14.5 Mild Steel - Flat products	1.144	108.7	113.7	105.1	105.2	105.5
1.3.14.6 Alloy steel other than Stainless Steel- Shapes	0.067	102.8	107.4	101.6	102.3	102.5
1.3.14.7 Stainless Steel - Semi Finished	0.924	102.9	106.3	102.0	101.3	101.4
1.3.14.8 Pipes & tubes	0.205	126.2	129.7	125.3	124.5	121.8
1.3.14.9 Non-ferrous metals incl. precious metals	1.693	107.0	106.9	104.9	103.5	104.9
1.3.14.10 Castings	0.925	112.8	113.5	106.9	106.4	109.3
1.3.14.11 Forgings of steel	0.271	146.5	143.5	145.2	145.9	147.5
1.3.15 MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT	**3.155**	**115.5**	**116.2**	**114.8**	**114.4**	**114.8**
1.3.15.1 Structural Metal Products	1.031	113.9	114.7	112.9	112.2	111.5
1.3.15.2 Tanks, Reservoirs and Containers of Metal	0.660	124.4	124.4	124.5	125.2	125.4
1.3.15.3 Steam generators, Except Central Heating Hot Water Boilers	0.145	104.7	102.6	107.7	107.7	107.7
1.3.15.4 Forging, Pressing, Stamping and Roll-Forming of Metal; Powder Metallurgy	0.383	100.5	101.2	98.9	101.4	100.3
1.3.15.5 Cutlery, Hand Tools and General Hardware	0.208	100.5	100.2	100.8	101.0	101.1
1.3.15.6 Other Fabricated Metal Products	0.728	124.0	126.1	122.6	119.9	122.9
1.3.16 MANUFACTURE OF COMPUTER, ELECTRONIC AND OPTICAL PRODUCTS	**2.009**	**110.4**	**111.4**	**109.9**	**109.9**	**109.9**
1.3.16.1 Electronic Components	0.402	98.1	97.4	98.2	98.1	97.5
1.3.16.2 Computers and Peripheral Equipment	0.336	135.0	135.0	135.0	135.0	135.0
1.3.16.3 Communication Equipment	0.310	117.0	116.7	115.1	115.0	115.4
1.3.16.4 Consumer Electronics	0.641	98.8	102.2	98.0	98.1	98.3
1.3.16.5 Measuring, Testing, Navigating and Control equipment	0.181	111.5	112.5	111.0	111.0	111.0
1.3.16.6 Watches and Clocks	0.076	139.1	138.7	141.1	141.1	142.0
1.3.16.7 Irradiation, Electromedical and Electrotherapeutic equipment	0.055	103.6	104.2	104.3	104.3	103.9
1.3.16.8 Optical instruments and Photographic equipment	0.008	110.2	109.5	112.2	112.2	112.1
1.3.17 MANUFACTURE OF ELECTRICAL EQUIPMENT	**2.930**	**111.3**	**110.9**	**110.3**	**110.4**	**111.1**
1.3.17.1 Electric motors, Generators, Transformers and Electricity distribution and Control apparatus	1.298	109.0	107.5	108.7	108.1	109.8
1.3.17.2 Batteries and Accumulators	0.236	117.0	117.6	117.0	116.6	117.8
1.3.17.3 Fibre optic cables for data transmission or live transmission of images	0.133	109.9	113.6	99.4	104.0	100.1
1.3.17.4 Other electronic and Electric wires and Cables	0.428	109.7	109.3	108.3	109.0	109.6
1.3.17.5 Wiring devices, Electric lighting & display equipment	0.263	111.1	111.4	111.1	112.0	111.3
1.3.17.6 Domestic appliances	0.366	119.9	120.4	118.1	118.1	118.1
1.3.17.7 Other electrical equipment	0.206	108.6	108.9	109.4	109.1	109.4
1.3.18 MANUFACTURE OF MACHINERY AND EQUIPMENT	**4.789**	**113.1**	**113.2**	**113.0**	**112.9**	**112.7**
1.3.18.1 Engines and Turbines, Except aircraft, Vehicle and Two wheeler engines	0.638	104.8	104.7	104.7	104.0	103.5
1.3.18.2 Fluid power equipment	0.162	119.9	119.3	119.9	120.7	120.6
1.3.18.3 Other pumps, Compressors, Taps and Valves	0.552	111.2	111.6	111.9	109.2	111.4
1.3.18.4 Bearings, Gears, Gearing and Driving elements	0.340	110.1	110.2	113.6	114.3	111.7
1.3.18.5 Ovens, Furnaces and Furnace burners	0.008	80.0	79.3	81.0	81.0	81.3
1.3.18.6 Lifting and Handling equipment	0.285	111.5	110.6	111.2	112.0	111.8

No. 21: Wholesale Price Index (Concld.)

(Base: 2011-12 = 100)

Commodities	Weight	2019-20	2019	2020		
			Jun.	Apr.	May (P)	Jun. (P)
1.3.18.7 Office machinery and Equipment	0.006	130.2	130.2	130.2	130.2	130.2
1.3.18.8 Other general-purpose machinery	0.437	130.9	133.7	128.4	128.4	128.1
1.3.18.9 Agricultural and Forestry machinery	0.833	120.6	119.7	121.6	121.3	120.6
1.3.18.10 Metal-forming machinery and Machine tools	0.224	108.1	107.4	109.6	109.6	109.5
1.3.18.11 Machinery for mining, Quarrying and Construction	0.371	75.1	74.5	75.0	74.4	76.2
1.3.18.12 Machinery for food, Beverage and Tobacco processing	0.228	125.2	125.3	119.3	125.3	125.2
1.3.18.13 Machinery for textile, Apparel and Leather production	0.192	119.7	120.8	119.2	119.3	117.5
1.3.18.14 Other special-purpose machinery	0.468	126.3	126.8	125.7	125.8	124.5
1.3.18.15 Renewable electricity generating equipment	0.046	66.0	66.6	64.3	64.3	64.3
1.3.19 MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS	**4.969**	**114.5**	**114.7**	**115.0**	**115.9**	**116.3**
1.3.19.1 Motor vehicles	2.600	115.2	115.7	115.4	116.8	117.9
1.3.19.2 Parts and Accessories for motor vehicles	2.368	113.7	113.5	114.5	114.9	114.6
1.3.20 MANUFACTURE OF OTHER TRANSPORT EQUIPMENT	**1.648**	**118.0**	**117.0**	**120.5**	**123.9**	**124.5**
1.3.20.1 Building of ships and Floating structures	0.117	158.8	158.8	158.8	158.8	158.8
1.3.20.2 Railway locomotives and Rolling stock	0.110	106.4	106.6	105.2	105.2	106.4
1.3.20.3 Motor cycles	1.302	114.3	113.0	117.6	121.9	122.6
1.3.20.4 Bicycles and Invalid carriages	0.117	128.9	128.7	128.2	128.5	128.6
1.3.20.5 Other transport equipment	0.002	126.1	125.1	127.4	127.4	127.2
1.3.21 MANUFACTURE OF FURNITURE	**0.727**	**130.9**	**132.1**	**132.3**	**132.0**	**131.0**
1.3.21.1 Furniture	0.727	130.9	132.1	132.3	132.0	131.0
1.3.22 OTHER MANUFACTURING	**1.064**	**112.7**	**108.7**	**120.0**	**119.7**	**123.3**
1.3.22.1 Jewellery and Related articles	0.996	109.9	105.6	117.6	117.1	120.9
1.3.22.2 Musical instruments	0.001	174.0	177.2	174.5	177.2	172.7
1.3.22.3 Sports goods	0.012	129.7	128.1	130.8	131.4	130.8
1.3.22.4 Games and Toys	0.005	136.9	137.7	137.0	135.9	139.9
1.3.22.5 Medical and Dental instruments and Supplies	0.049	162.1	161.1	163.2	165.0	167.2
2 FOOD INDEX	**24.378**	**147.6**	**144.2**	**147.7**	**146.1**	**148.6**

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, Government of India.

ANNEXURE-28
Submission by GHIAL - WPI Dec 25 P

No. 22: Wholesale Price Index

(Base: 2011-12 = 100)

Commodities	Weight	2024-25	2024	2025		
			Dec.	Oct.	Nov.(P)	Dec.(P)
	1	2	3	4	5	6
1 ALL COMMODITIES	**100.000**	**154.9**	**155.7**	**155.1**	**155.9**	**157.0**
1.1 PRIMARY ARTICLES	**22.618**	**192.5**	**193.8**	**188.7**	**192.1**	**194.2**
1.1.1 FOOD ARTICLES	**15.256**	**205.3**	**207.5**	**199.8**	**204.8**	**206.6**
1.1.1.1 Food Grains (Cereals+Pulses)	3.462	210.1	213.7	204.6	205.3	205.9
1.1.1.2 Fruits & Vegetables	3.475	241.4	244.7	216.1	234.5	240.9
1.1.1.3 Milk	4.440	185.8	185.6	191.6	191.4	191.6
1.1.1.4 Eggs, Meat & Fish	2.402	173.4	174.7	174.3	176.7	176.7
1.1.1.5 Condiments & Spices	0.529	232.7	240.2	204.0	210.8	214.1
1.1.1.6 Other Food Articles	0.948	213.6	216.3	223.4	224.5	224.4
1.1.2 NON-FOOD ARTICLES	**4.119**	**161.7**	**166.2**	**165.3**	**166.5**	**171.1**
1.1.2.1 Fibres	0.839	161.4	159.3	166.8	163.6	166.9
1.1.2.2 Oil Seeds	1.115	181.5	182.8	198.2	203.3	209.9
1.1.2.3 Other non-food Articles	1.960	138.7	140.7	139.6	138.6	139.6
1.1.2.4 Floriculture	0.204	277.4	349.3	226.5	244.9	279.1
1.1.3 MINERALS	**0.833**	**229.0**	**230.1**	**253.3**	**253.3**	**257.4**
1.1.3.1 Metallic Minerals	0.648	219.2	219.1	248.5	248.5	252.3
1.1.3.2 Other Minerals	0.185	263.4	268.7	269.9	270.2	275.3
1.1.4 CRUDE PETROLEUM & NATURAL GAS	**2.410**	**151.3**	**141.9**	**136.2**	**134.0**	**133.4**
1.2 FUEL & POWER	**13.152**	**150.0**	**151.8**	**145.2**	**146.5**	**148.3**
1.2.1 COAL	**2.138**	**135.6**	**135.6**	**136.1**	**136.1**	**137.0**
1.2.1.1 Coking Coal	0.647	143.4	143.4	146.4	146.4	149.5
1.2.1.2 Non-Coking Coal	1.401	125.8	125.8	126.6	126.6	126.6
1.2.1.3 Lignite	0.090	232.4	231.2	209.0	209.0	209.4
1.2.2 MINERAL OILS	**7.950**	**156.2**	**153.9**	**149.7**	**148.7**	**148.8**
1.2.3 ELECTRICITY	**3.064**	**144.1**	**157.5**	**139.9**	**148.1**	**154.7**
1.3 MANUFACTURED PRODUCTS	**64.231**	**142.6**	**143.0**	**145.3**	**145.0**	**145.6**
1.3.1 MANUFACTURE OF FOOD PRODUCTS	**9.122**	**172.0**	**176.8**	**179.0**	**178.6**	**178.4**
1.3.1.1 Processing and Preserving of meat	0.134	155.7	155.7	158.7	157.9	159.9
1.3.1.2 Processing and Preserving of fish, Crustaceans, Molluscs and products thereof	0.204	144.9	143.5	151.7	150.4	154.3
1.3.1.3 Processing and Preserving of fruit and Vegetables	0.138	132.6	133.3	135.4	134.4	134.0
1.3.1.4 Vegetable and Animal oils and Fats	2.643	168.5	185.6	186.8	185.7	186.6
1.3.1.5 Dairy products	1.165	180.8	182.1	186.6	187.6	189.1
1.3.1.6 Grain mill products	2.010	186.9	189.5	185.8	184.7	183.5
1.3.1.7 Starches and Starch products	0.110	167.0	165.1	147.8	148.4	144.9
1.3.1.8 Bakery products	0.215	170.5	173.7	177.2	177.0	177.2
1.3.1.9 Sugar, Molasses & honey	1.163	139.1	136.0	144.4	144.6	143.9
1.3.1.10 Cocoa, Chocolate and Sugar confectionery	0.175	160.6	167.2	174.4	175.5	177.1
1.3.1.11 Macaroni, Noodles, Couscous and Similar farinaceous products	0.026	156.7	166.4	161.2	163.9	168.6
1.3.1.12 Tea & Coffee products	0.371	190.7	173.0	188.8	188.5	180.5
1.3.1.13 Processed condiments & salt	0.163	192.6	192.5	189.3	190.7	191.8
1.3.1.14 Processed ready to eat food	0.024	152.7	154.7	155.8	155.7	155.1
1.3.1.15 Health supplements	0.225	185.1	189.0	190.1	190.5	189.1
1.3.1.16 Prepared animal feeds	0.356	204.1	201.7	205.0	204.3	203.7
1.3.2 MANUFACTURE OF BEVERAGES	**0.909**	**134.1**	**134.5**	**135.9**	**135.7**	**135.4**
1.3.2.1 Wines & spirits	0.408	136.0	137.0	139.5	138.7	138.4
1.3.2.2 Malt liquors and Malt	0.225	138.7	139.0	140.6	140.6	140.4
1.3.2.3 Soft drinks; Production of mineral waters and Other bottled waters	0.275	127.5	127.2	126.8	127.3	126.9
1.3.3 MANUFACTURE OF TOBACCO PRODUCTS	**0.514**	**177.8**	**180.3**	**181.6**	**181.4**	**183.0**
1.3.3.1 Tobacco products	0.514	177.8	180.3	181.6	181.4	183.0

No. 22: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2024-25	2024	2025		
			Dec.	Oct.	Nov.(P)	Dec.(P)
	1	2	3	4	5	6
1.3.4 MANUFACTURE OF TEXTILES	**4.881**	**136.3**	**136.8**	**138.5**	**138.7**	**139.1**
1.3.4.1 Preparation and Spinning of textile fibres	2.582	121.4	120.7	120.2	119.8	119.6
1.3.4.2 Weaving & Finishing of textiles	1.509	158.3	161.2	165.5	167.0	168.6
1.3.4.3 Knitted and Crocheted fabrics	0.193	124.0	123.7	127.9	125.9	125.4
1.3.4.4 Made-up textile articles, Except apparel	0.299	160.4	161.5	161.8	161.8	161.4
1.3.4.5 Cordage, Rope, Twine and Netting	0.098	142.7	144.4	164.3	165.3	167.0
1.3.4.6 Other textiles	0.201	134.9	133.7	134.4	133.8	134.7
1.3.5 MANUFACTURE OF WEARING APPAREL	**0.814**	**153.4**	**154.4**	**156.4**	**157.1**	**156.8**
1.3.5.1 Manufacture of Wearing Apparel (woven), Except fur Apparel	0.593	150.9	151.6	154.8	154.9	154.6
1.3.5.2 Knitted and Crocheted apparel	0.221	160.1	161.9	160.7	162.8	162.8
1.3.6 MANUFACTURE OF LEATHER AND RELATED PRODUCTS	**0.535**	**125.3**	**126.0**	**127.4**	**127.4**	**127.6**
1.3.6.1 Tanning and Dressing of leather; Dressing and Dyeing of fur	0.142	106.1	108.6	109.5	108.8	109.3
1.3.6.2 Luggage, HandbAgs, Saddlery and Harness	0.075	142.5	142.4	143.0	143.2	141.9
1.3.6.3 Footwear	0.318	129.7	129.9	131.8	131.9	132.4
1.3.7 MANUFACTURE OF WOOD AND PRODUCTS OF WOOD AND CORK	**0.772**	**149.2**	**148.3**	**151.1**	**151.0**	**151.2**
1.3.7.1 Saw milling and Planing of wood	0.124	141.1	140.7	143.7	142.3	143.6
1.3.7.2 Veneer sheets; Manufacture of plywood, Laminboard, Particle board and Other panels and Boards	0.493	148.6	147.5	150.2	150.4	150.5
1.3.7.3 Builder's carpentry and Joinery	0.036	215.3	214.6	215.4	213.9	213.9
1.3.7.4 Wooden containers	0.119	140.6	139.5	143.4	143.9	143.4
1.3.8 MANUFACTURE OF PAPER AND PAPER PRODUCTS	**1.113**	**139.2**	**138.3**	**140.3**	**140.5**	**140.2**
1.3.8.1 Pulp, Paper and Paperboard	0.493	144.6	143.2	145.0	145.6	145.2
1.3.8.2 Corrugated paper and Paperboard and Containers of paper and Paperboard	0.314	147.3	148.9	149.9	149.9	149.6
1.3.8.3 Other articles of paper and Paperboard	0.306	122.4	119.7	122.9	122.7	122.5
1.3.9 PRINTING AND REPRODUCTION OF RECORDED MEDIA	**0.676**	**187.3**	**188.7**	**190.1**	**189.9**	**189.6**
1.3.9.1 Printing	0.676	187.3	188.7	190.1	189.9	189.6
1.3.10 MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS	**6.465**	**136.5**	**136.5**	**136.8**	**136.5**	**137.0**
1.3.10.1 Basic chemicals	1.433	138.6	139.7	141.3	140.6	142.4
1.3.10.2 Fertilizers and Nitrogen compounds	1.485	143.1	143.0	143.7	143.5	143.6
1.3.10.3 Plastic and Synthetic rubber in primary form	1.001	133.6	132.9	132.8	132.0	132.4
1.3.10.4 Pesticides and Other agrochemical products	0.454	128.8	128.7	130.8	130.6	131.1
1.3.10.5 Paints, Varnishes and Similar coatings, Printing ink and Mastics	0.491	139.5	138.6	138.0	138.0	138.3
1.3.10.6 Soap and Detergents, Cleaning and Polishing preparations, Perfumes and Toilet preparations	0.612	139.7	140.4	141.8	142.2	142.5
1.3.10.7 Other chemical products	0.692	135.4	135.1	132.1	132.7	132.4
1.3.10.8 Man-made fibres	0.296	104.9	103.9	102.0	100.9	100.5
1.3.11 MANUFACTURE OF PHARMACEUTICALS, MEDICINAL CHEMICAL AND BOTANICAL PRODUCTS	**1.993**	**144.3**	**144.0**	**146.2**	**146.1**	**146.3**
1.3.11.1 Pharmaceuticals, Medicinal chemical and Botanical products	1.993	144.3	144.0	146.2	146.1	146.3
1.3.12 MANUFACTURE OF RUBBER AND PLASTICS PRODUCTS	**2.299**	**129.0**	**129.0**	**128.9**	**128.5**	**127.9**
1.3.12.1 Rubber Tyres and Tubes; Retreading and Rebuilding of Rubber Tyres	0.609	115.6	117.1	114.6	113.8	113.9
1.3.12.2 Other Rubber Products	0.272	112.1	112.3	112.7	112.9	111.5
1.3.12.3 Plastics products	1.418	138.1	137.3	138.1	137.8	137.1
1.3.13 MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS	**3.202**	**131.5**	**131.7**	**132.6**	**132.2**	**132.7**
1.3.13.1 Glass and Glass products	0.295	163.2	163.2	162.7	163.2	161.8
1.3.13.2 Refractory products	0.223	121.6	125.2	123.1	124.5	124.4
1.3.13.3 Clay Building Materials	0.121	124.4	123.3	133.9	134.1	140.9
1.3.13.4 Other Porcelain and Ceramic Products	0.222	124.6	124.6	126.1	126.1	126.3
1.3.13.5 Cement, Lime and Plaster	1.645	130.4	130.2	131.3	130.2	130.6

No. 22: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2024-25	2024	2025		
			Dec.	Oct.	Nov.(P)	Dec.(P)
	1	2	3	4	5	6
1.3.13.6 Articles of Concrete, Cement and Plaster	0.292	139.2	140.2	139.0	138.8	139.1
1.3.13.7 Cutting, Shaping and Finishing of Stone	0.234	134.4	135.9	139.9	140.2	140.5
1.3.13.8 Other Non-Metallic Mineral Products	0.169	95.2	94.6	91.3	92.7	92.8
1.3.14 MANUFACTURE OF BASIC METALS	**9.646**	**139.7**	**137.5**	**137.1**	**136.9**	**137.4**
1.3.14.1 Inputs into steel making	1.411	133.6	129.1	132.0	131.3	131.4
1.3.14.2 Metallic Iron	0.653	141.8	133.4	126.4	126.1	126.6
1.3.14.3 Mild Steel - Semi Finished Steel	1.274	117.9	116.8	114.4	114.1	114.7
1.3.14.4 Mild Steel -Long Products	1.081	140.4	139.5	133.8	133.8	133.2
1.3.14.5 Mild Steel - Flat products	1.144	134.2	130.1	129.3	127.4	126.0
1.3.14.6 Alloy steel other than Stainless Steel- Shapes	0.067	135.4	132.3	125.6	124.3	125.3
1.3.14.7 Stainless Steel - Semi Finished	0.924	131.1	129.1	118.9	118.8	120.3
1.3.14.8 Pipes & tubes	0.205	164.7	162.3	161.7	161.2	159.2
1.3.14.9 Non-ferrous metals incl. precious metals	1.693	157.4	157.5	167.9	169.2	172.0
1.3.14.10 Castings	0.925	144.9	145.3	143.9	144.1	144.6
1.3.14.11 Forgings of steel	0.271	172.2	172.1	173.7	173.5	172.9
1.3.15 MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT	**3.155**	**136.0**	**135.9**	**136.7**	**136.0**	**136.3**
1.3.15.1 Structural Metal Products	1.031	130.8	130.8	130.1	129.7	130.8
1.3.15.2 Tanks, Reservoirs and Containers of Metal	0.660	149.5	147.8	152.5	149.8	149.9
1.3.15.3 Steam generators, Except Central Heating Hot Water Boilers	0.145	109.8	107.6	113.7	113.1	113.1
1.3.15.4 Forging, Pressing, Stamping and Roll-Forming of Metal; Powder Metallurgy	0.383	138.0	140.8	131.8	132.1	131.7
1.3.15.5 Cutlery, Hand Tools and General Hardware	0.208	102.0	102.1	104.2	104.4	104.4
1.3.15.6 Other Fabricated Metal Products	0.728	144.9	144.8	148.2	147.9	148.0
1.3.16 MANUFACTURE OF COMPUTER, ELECTRONIC AND OPTICAL PRODUCTS	**2.009**	**121.5**	**121.3**	**122.4**	**121.4**	**121.0**
1.3.16.1 Electronic Components	0.402	117.9	118.3	120.9	121.1	120.0
1.3.16.2 Computers and Peripheral Equipment	0.336	134.2	132.7	129.7	129.7	129.7
1.3.16.3 Communication Equipment	0.310	146.0	146.2	147.6	147.6	146.9
1.3.16.4 Consumer Electronics	0.641	101.1	99.8	100.5	97.2	96.4
1.3.16.5 Measuring, Testing, Navigating and Control equipment	0.181	119.9	121.1	126.8	127.8	127.8
1.3.16.6 Watches and Clocks	0.076	167.9	172.7	177.6	175.0	177.9
1.3.16.7 Irradiation, Electromedical and Electrotherapeutic equipment	0.055	114.4	115.5	114.3	114.7	118.2
1.3.16.8 Optical instruments and Photographic equipment	0.008	107.4	108.9	117.7	118.8	118.8
1.3.17 MANUFACTURE OF ELECTRICAL EQUIPMENT	**2.930**	**133.7**	**133.9**	**136.1**	**136.0**	**136.3**
1.3.17.1 Electric motors, Generators, Transformers and Electricity distribution and Control apparatus	1.298	132.3	133.0	133.7	133.2	132.7
1.3.17.2 Batteries and Accumulators	0.236	141.3	141.3	145.1	145.5	145.2
1.3.17.3 Fibre optic cables for data transmission or live transmission of images	0.133	118.6	118.0	117.3	117.3	118.6
1.3.17.4 Other electronic and Electric wires and Cables	0.428	154.4	154.0	163.0	163.8	167.6
1.3.17.5 Wiring devices, Electric lighting & display equipment	0.263	118.4	117.7	118.6	118.6	118.7
1.3.17.6 Domestic appliances	0.366	131.8	131.5	131.7	131.9	131.0
1.3.17.7 Other electrical equipment	0.206	123.4	125.0	126.7	126.7	127.6
1.3.18 MANUFACTURE OF MACHINERY AND EQUIPMENT	**4.789**	**130.8**	**130.5**	**132.8**	**133.0**	**133.1**
1.3.18.1 Engines and Turbines, Except aircraft, Vehicle and Two wheeler engines	0.638	132.8	132.5	138.4	138.6	137.3
1.3.18.2 Fluid power equipment	0.162	134.5	134.9	135.1	135.2	135.3
1.3.18.3 Other pumps, Compressors, Taps and Valves	0.552	118.5	118.9	121.0	121.0	122.2
1.3.18.4 Bearings, Gears, Gearing and Driving elements	0.340	128.5	129.6	131.6	131.9	132.9
1.3.18.5 Ovens, Furnaces and Furnace burners	0.008	86.6	87.0	88.4	88.4	91.3
1.3.18.6 Lifting and Handling equipment	0.285	130.0	129.9	131.9	131.9	132.1

No. 22: Wholesale Price Index (Concld.)

(Base: 2011-12 = 100)

Commodities	Weight	2024-25	2024	2025		
			Dec.	Oct.	Nov.(P)	Dec.(P)
	1	2	3	4	5	6
1.3.18.7 Office machinery and Equipment	0.006	130.2	130.2	130.2	130.2	130.2
1.3.18.8 Other general-purpose machinery	0.437	145.3	141.5	140.4	142.8	143.9
1.3.18.9 Agricultural and Forestry machinery	0.833	145.5	145.8	145.9	145.9	146.1
1.3.18.10 Metal-forming machinery and Machine tools	0.224	123.2	123.1	127.4	127.4	127.7
1.3.18.11 Machinery for mining, Quarrying and Construction	0.371	89.8	90.0	93.0	93.4	93.1
1.3.18.12 Machinery for food, Beverage and Tobacco processing	0.228	126.1	126.0	126.8	126.8	126.9
1.3.18.13 Machinery for textile, Apparel and Leather production	0.192	141.4	141.3	146.8	143.8	143.3
1.3.18.14 Other special-purpose machinery	0.468	144.9	144.0	147.5	147.6	147.2
1.3.18.15 Renewable electricity generating equipment	0.046	69.2	69.0	69.3	69.3	69.1
1.3.19 MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS	**4.969**	**129.9**	**130.0**	**130.4**	**130.4**	**130.4**
1.3.19.1 Motor vehicles	2.600	130.6	130.8	130.3	130.1	130.0
1.3.19.2 Parts and Accessories for motor vehicles	2.368	129.1	129.1	130.5	130.8	130.7
1.3.20 MANUFACTURE OF OTHER TRANSPORT EQUIPMENT	**1.648**	**145.2**	**145.7**	**151.9**	**151.7**	**151.6**
1.3.20.1 Building of ships and Floating structures	0.117	180.5	177.9	190.7	190.7	190.8
1.3.20.2 Railway locomotives and Rolling stock	0.110	108.9	108.8	110.7	110.7	111.3
1.3.20.3 Motor cycles	1.302	146.0	146.8	153.1	152.9	152.7
1.3.20.4 Bicycles and Invalid carriages	0.117	134.9	135.1	137.8	138.0	138.0
1.3.20.5 Other transport equipment	0.002	163.2	163.7	167.0	167.0	166.7
1.3.21 MANUFACTURE OF FURNITURE	**0.727**	**160.3**	**161.3**	**164.1**	**164.1**	**164.3**
1.3.21.1 Furniture	0.727	160.3	161.3	164.1	164.1	164.3
1.3.22 OTHER MANUFACTURING	**1.064**	**183.8**	**183.1**	**245.9**	**240.7**	**266.5**
1.3.22.1 Jewellery and Related articles	0.996	185.4	184.6	251.4	245.8	273.3
1.3.22.2 Musical instruments	0.001	201.9	200.6	205.4	206.3	205.7
1.3.22.3 Sports goods	0.012	164.9	167.9	172.7	173.0	173.1
1.3.22.4 Games and Toys	0.005	163.1	163.7	168.8	168.9	169.3
1.3.22.5 Medical and Dental instruments and Supplies	0.049	158.6	158.6	162.1	162.1	163.2
2 FOOD INDEX	**24.378**	**192.9**	**196.0**	**192.0**	**195.0**	**196.0**

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, Government of India.

ANNEXURE-29 Submission by GHIAL - Updates required from GHIAL (Hyd Airport AERA) 27.02.2026_CP4

Requirements and Queries on the CAPEX Sheet for CP-4 Hyderabad International Airport				
Sr. No.	**CAPEX Item**	**Comments**	**Requirements**	**GHIAL Comments**
1	PTB, Runway & Taxiway	Please provide basis for considering Escalation factor of 5.80%- Note (As per discussion meeting held on 23.02.2026)	Only list of equipments to be imported provided. Provide Justification and Details for calculation of Escalation Factor.	Response already Shared as part of queries dated 24-02-2026.
2	Airside Works- Northern Precinct		(i) Provide details on the planning of apron areas, number of stands etc. (ii) Provide turn around times in the peak hours used for calculation purposes. (iii) Provide utilization factor considered for the calculation purpose. (iv) Provide the basis for calculation of demand for night parking stands.	(i) Based on the current operational data, we have considered 350,000 pax/stand which is yielding 58 stands, we have assumed requirement of 15 stands for other purposes such as overnight parking, AOG, off-stand GSE. (ii) 62 min turnaround +15 min buffer for Narrow Body and 115 min for wide body (iii) 73% is our current utilization at 647 movements/day which can reach 83-85%. Pro-rata has been considered for our calculation purpose. (iv) Night Parking Stands are considered based on airline demand
3	Northern PTB	Please provide basis for considering PTB unit area rate 212500 per sqm.	Provide details and supporting documents.	Considered the 34MPPA rate of Rs. 1,56,148 as base rate and escalated @ 5.8% from FY 2024 to FY Sep 2029 (5.5 Years). The details for base cost of Rs.156,148/- and escalation factor was provided as part of response to 24.02.2026 queries.

4	PTB	As per MYTP page no 65, ultimate capacity of current PTB is visualised to be 47MPPA and the proposed development is taken up for a terminal building that can handle 20MPPA. Thereby total PTB capacity will be 67MPPA which is more than 51MPPA (Projected traffic).	Please clarify the requirement of construction PTB of capacity 20 MPPA against requirement of (51-47) = 4 MPPA	Response already Shared as part of queries dated 24-02-2026.
5	Runway & Taxiway	As per MYTP page no 53, the runway has 42 approved movements at present and currently handling average of 36 peak hour movements. With high-intensity operations, this airside capacity can be further extended to 46ATMs per hour. According to CAPA study, the demand for these 46 ATMs per hour is expected to exceeded during FY28-29.	(i) Please provide the peak hour ATMs during FY31 and subsequently, justifying the requirement of parallel taxiway on northern side and connecting taxiways that will be connecting both the runways during this Control Period. (ii) May also provide the quantity and cost details of 7900m of taxiways taken in CAPEX.	(i) Response already Shared as part of queries dated 24-02-2026. (ii) AutoCAD file has been provided as basis for quantification. Cost basis - Response already Shared as part of queries dated 24-02-2026.
6	Landscaping- Northern PTB		Provide Basis for finalization of Cost - Details and supporting documents	Response already Shared as part of queries dated 24-02-2026.

Requirements and Queries on the CAPEX Sheet for CP-4 Hyderabad International Airport				
Sr. No.	**CAPEX Item**	**Comments**	**Requirements**	
7	Airport Connectivity and Transport systems for RGIA	Unitrans Mobility Solutions- Study Report- As mentioned in MYTP Page no. 69 to 75- (As per discuusion meeting held on 23.02.2026).	(i) Provide details and supporting documents/ reports on essentiality of the proposed infrastructure. (ii) Proivde justification quantity and cost details of proposed infrastructure.	(i) Response already Shared as part of queries dated 24-02-2026. (ii) Details of quantity and cost will be provided shortly
8	Capex cost towards Northern Runway & Associated works	Reference to the mentioned works in the cost estimate 4th CAPEX file- (refer to Appendix-1) (As per discussion meeting held on 23.02.2026)-	(i) Provide details and supporting documents. Work order/BOQ/ any other supporting documents for the mentioned line items.	Response already Shared as part of queries dated 24-02-2026.
9	Capex cost towards Northern PTB	Reference to the mentioned works in the cost estimate 4th CAPEX file- (refer to Annexure) (As per discuusion meeting held on 23.02.2026)	(i) Provide details and supporting documents. Work order/BOQ/ any other supporting documents for the mentioned line items.	Response already Shared as part of queries dated 24-02-2026.

<table>
<tr><td>10</td><td>Master Plan of Northern Precinct</td><td>Updated master plan of Northern Precinct- Autocad file.</td><td>(i) Provide Updated master plan of Northern Precinct- Autocad file.
(ii) Provide the updated traffic numbers.</td><td>(i) Response already Shared as part of queries dated 24-02-2026.
(ii) (.in Million)
<table>
<tr><td>Year</td><td>Dom</td><td>Int</td><td>Total</td></tr>
<tr><td>FY26</td><td>25.8</td><td>5.7</td><td>31.5</td></tr>
<tr><td>FY27</td><td>28.7</td><td>6.3</td><td>35.0</td></tr>
<tr><td>FY28</td><td>32.1</td><td>7.2</td><td>39.3</td></tr>
<tr><td>FY29</td><td>36.4</td><td>8.2</td><td>44.6</td></tr>
<tr><td>FY30</td><td>38.6</td><td>9.3</td><td>47.9</td></tr>
<tr><td>FY31</td><td>41.2</td><td>10.3</td><td>51.5</td></tr>
</table></td></tr>
<tr><td>11</td><td>General CAPEX Works</td><td>Reference to the mentioned works in the cost estimate 4th CAPEX file (Annexure-16 General CAPEX)- (refer to Appendix-2)</td><td></td><td>Responses will be provided shortly</td></tr>
<tr><td>12</td><td>Essentiality of Various Components</td><td>Essentiality of various components involving capex expenditure may please be provided.</td><td></td><td>Already provided the background for General Capex Projects >5 crores.
(Refer Annexure-16 General CAPEX)</td></tr>
<tr><td colspan="4">Comments from PWC</td><td></td></tr>
<tr><td>13</td><td>Airport Systems</td><td>Please provide the nature of all airport systems claimed, along with a detailed cost breakdown and a system-wise list indicating the type of system and its intended users (e.g., airport employees, passengers, airlines, or other stakeholders).</td><td></td><td>Response already Shared as part of queries dated 24-02-2026.</td></tr>
<tr><td>14</td><td>GSE Tunnel</td><td>Please submit a brief write-up describing the project location, the objectives and issues it addresses, and include appropriate location and layout maps for GSE tunnel</td><td></td><td>Response already Shared as part of queries dated 24-02-2026.</td></tr>
</table>

Requirements and Queries on the CAPEX Sheet for CP-4 Hyderabad International Airport				
Sr. No.	**CAPEX Item**	**Comments**	**Requirements**	
15	Expansion of Kerbs and Approach Ramp	Please furnish details of the proposed expansion, including the total length and relevant dimensional particulars for expansion of Kerbs and approach ramp.		Response already Shared as part of queries dated 24-02-2026.
16	Road connectivity	Please provide detailed information on the road works, including their configuration, intended purpose, and nature of usage by different user groups.		Response already Shared as part of queries dated 24-02-2026.

COMMENTS BY GHIAL

APPENDIX-1

Capex Costs towards Northern Runway & associated airside works

Activity	Unit	Qty	Rate	Cost in Crores	Comments	Requirements
Runway, Taxiway and Apron	Sqm	1,323,644	12,936	1,712	The per square meter cost has been derived from the ongoing Bravo Taxiway contract awarded to M/s Megawide Infrastructure India Private Limited (PO NO: 5000018972) in Oct-24. To account for inflation and market dynamics, a year-on-year escalation factor of 5.8% has been applied from Apr-25 to Sep-26 which is projected completion date.	Work order/BOQ/ any other supporting documents - Response already Shared as part of queries dated 24-02-2026.
Elevated Taxiway	Sqm	153,000	46,435	710	As similar works have been executed in Delhi airport as recently as 2023 the costs of the cross taxiway at Delhi has been used as the base and then adjusted for year on year escalation	Work order/BOQ/ any other supporting documents- Response already Shared as part of queries dated 24-02-2026.
Airside Anciliary Building	Sqm	12,000	80,966	97	The cost per square meter has been derived based on the CNS ATM building works executed in Mar-22. To incorporate inflationary trends and prevailing market dynamics, a year-on-year escalation factor of 5.8 % has been applied from Apr-22 to Sep-29 which is projected completion date.	Work order/BOQ/ any other supporting documents- Response already Shared as part of queries dated 24-02-2026.
Perimeter Wall	M	14,500	25,776	37	As per internal estimates	Work order/BOQ/ any other supporting documents - Response already Shared as part of queries dated 24-02-2026.
Earth Works	M3	11,000,000	827	910	Rate from order placed in 2024 is 801 INR / m3 while latest order 5000021147 for earthwork and clearing works out to 860 INR /m3. An average rate of 827 INR/ m3 has been considered due to the rate reductions that may be available because of high volumes for this project	Work order/BOQ/ any other - supporting documents - Response already Shared as part of queries dated 24-02-2026.
External Utilities				194	Considered as 4% of capex based on experience at other airports. Refer GMR Goa International Airport (GGIAL) order- 117 cr for utilties against a hard cost of 2695 cr, 4.34%. Current capex- 9951 cr. 4% - 398 cr. For purposes of allocation cost split equally between airside and terminal	Work order/BOQ/ any other supporting documents - Response already Shared as part of queries dated 24-02-2026.
GSE Building				28	2500 m2 building considered including painting workshop, equipment shop etc. Rate based on GGIAL GH order (1300 m2 GSE building @ 12.56 cr) in 2023	Work order/BOQ/ any other supporting documents - Response already Shared as part of queries dated 24-02-2026.

COMMENTS BY GHIAL

APPENDIX-1

Capex Costs towards Northern Runway & associated airside works

Airside Roads	lane KMS	45	18,494,279	83	The derived rate from Purchase Order No. 5000021147, issued on October 25, is ₹4,309 per square meter. However, the rate considered for the current evaluation is ₹4,100 per square meter, which is well within the acceptable range and therefore deemed appropriate. This rate translates to ₹1,43,50,000 per lane kilometer. The same has subsequently been adjusted to account for inflation.	Work order/BOQ/ any other supporting documents - Response already Shared as part of queries dated 24-02-2026.
GSE Parking	Sqm	25,000	12,936	32	The per square meter cost has been derived from the ongoing Bravo Taxiway contract awarded to M/s Megawide Infrastructure India Private Limited (PO NO: 5000018972) in Oct-24. To account for inflation and market dynamics, a year-on-year escalation factor of 5.8% has been applied from Apr-25 to Sep-26 which is projected completion date.	Work order/BOQ/ any other supporting documents- Response already Shared as part of queries dated 24-02-2026.

Activity	Unit	Qty	Rate	Cost in Crores	Comments	Requirements
Landside Roads	Sqm	28,455	5,284	15	From PO- 5000021147 issued in Oct 25, derived rates is 4334 INR/m2. Rate considered is 4100 / m2. To incorporate inflationary trends and prevailing market dynamics, a year-on-year escalation factor of 5.8 % has been applied from March-25 to Sep-29 which is projected completion date.	Work order/BOQ/ any other supporting documents - Response already Shared as part of queries dated 24-02-2026.
Dual Elevated Ramp	Sqm	25,000	46,435	116	Since the work consists of similar complexity, which was executed in Delhi airport as recently as 2023, the costs of the cross taxiway at Delhi has been used as the base and then adjusted for year on year escalation.	Work order/BOQ/ any other supporting documents - Response already Shared as part of queries dated 24-02-2026.
Landscaping				67	As per internal estimates	Work order/BOQ/ any other supporting documents- Response already Shared as part of queries dated 24-02-2026.

General Capex Proposed by GHIAL for 4th Control Period
INR in Crores

APPENDIX-2

Terminal Operations

Project	Project Description	Cost (INR Cr.)	Location	Details Required
Counters/ Glass works/Project work/ Infra Enhancement	The project is need to address essential glass work, infrastructure enhancements, counter installation	8	Southern PTB	
Procuremnt of Baggage trolleys	**Back ground:** Due to 19% annual growth in the Passenger traffic and upcomming new Terminal building on the Northern side within 4-5 years, the procurement of the additional baggage trollies is essential to meet current and futre demand. The projections ahd been dome inline with the pax growth and new terminal building. **Proposal:** It aligns with projected growth and aims to enhance operational effeciency and pax convenience. **Benefits:** key bebefits includes improved baggage handling, reduced wait times and overall pax experience. The procureemnt ensures readiness for increased pax loads and suports seamless operations across the terminals.	8.1	Southern+ ~~Northern~~ PTB	
Others < 5cr	Other sustainance Capex	41.8	Details Required	

Security and Vigilance

Project	Project Description	Cost (INR Cr.)	Location	Details Required
Body Scanners for PESC Area	**Background:** 02 No. of FBS for each CTX as per BCAS circular 5/2019 **Proposal:** Initially we proposed to purchase 1 boday scanners for each CTX machine in Terminal PESC area with 29 CTX machines and will be implemented in phase manner to adhere the BCAS compliance. **Benefits:** Body scanners system shall provide automatic detection of items over the skin with image free solution using a generic mannequin. Threats shall be graphically presented on the generic mannequin so that security staff can tell the location of these objects for targeted search.	166	Southern+ ~~Northern~~ PTB	No. of Machines, locations, their requirement and Cost

General Capex Proposed by GHIAL for 4th Control Period				APPENDIX-2
INR in Crores				
Construction of Dog kennel for CISF Dog squad	**Background:** In line with BCAS Circular 01/2011 and Addendum AC 01/2024, CISF has been directed to strengthen aviation security through the deployment of Canine (K9) units at Indian airports. RGIA has been authorized to deploy 69 canines as part of this national security initiative. **Proposal:** The project includes constructing dedicated kennels with support facilities, procuring trained canines, providing handler training, and integrating K9 units into high-risk operational zones such as cargo, screening, and perimeter areas. **Benefits:** The deployment will enhance threat detection, enable rapid response, and ensure	6.4	Southern+ ~~Northern~~ PTB	
CTX Machine for PESC Area	**Background:** This was proposed basis the life assessment of existing XBIS units, whereas since a new BCAS circular exiting all XBIS to be replaced with CT machine at PESC points. **Proposal:** We proposed to purchase the CT hand baggage XBIS for Terminal in phase manner to adhere the BCAS compliance **Benefits:** BCAS compliance will be fulfil and CT technology provides better viewing for easy identification of threat/ restricted articles in comparison with single/dual view XBIS. This optimized the screening time. Other Salient features • High resolution 3 D images • Ease of screening • No need to take out the stuffs from baggage This also contributes enhanced throughput	120	Southern+ ~~Northern~~ PTB	No. of Machines, locations, their requirement and Cost

ETD machines	**Background:** To prevent the introduction of explosives or dangerous devices into civil aviation, the Bureau of Civil Aviation Security (BCAS) has mandated the phased installation of Explosive Detection Systems (EDS) at all airports handling commercial flights. This directive is supported by AVSEC Order No. 24/2011 and Circular No. 03/2006, requiring EDS deployment in Security Hold Areas, Hold Baggage, and Cargo Screening zones. **Proposal:** As per BCAS guidelines, one EDS unit must be installed for every two X-ray Baggage Inspection Systems (X-BIS), or one EDS if only one X-BIS is present. The project includes installation of EDS units at key screening points, along with supporting infrastructure and trained, certified personnel for operation. Additional screening equipment such as HHMDs, DFMDs, and ETDs will be deployed at terminal entry gates based on the number of access points. **Benefits:** This initiative will significantly enhance threat detection capabilities, ensure compliance with national aviation security standards, and improve passenger safety. It also supports faster and more reliable screening processes, reducing the risk of unlawful interference with aircraft operations.	5.8	Southern+ ~~Northern~~ PTB	No. of Machines, locations, their requirement and Cost

General Capex Proposed by GHIAL for 4th Control Period				**APPENDIX-2**
INR in Crores				
RDE (Radiologial detection equipment)	**Background**: Radiological Detection Equipment (RDE) is used to detect any radiological material present in baggage, vehicle or passenger for security entry / exit point of Airports. If the initial check shows the radiation level above the permissible limit it will raise an alarm automatically and capture the image of the person or vehicle. It is mandated by BCAS vide circularno.08/2024 dated 28.10.2024 and also issued the General requirement and technical specifications for installation of RDE by Airport operator **Proposal**: The purpose of primary benefit of Radiological Detection equipment is that significantly improve the overall safety of people and facilities by detecting the radiological substances. **Benefits**: Radiological detection device will contribute to safeguarding national security by	8.4	Southern PTB	No. of Machines, locations, their requirement and Cost
Others < 5cr	Other sustainance Capex	45.8	Details Required	

Project, Engineering & Maintenance				
Project	**Project Description**	**Cost (INR Cr.)**	Location	Details Required

BIM 3D modelling (LIDAR Survey)	**Background:** The existing terminal at RGIA, built in 2008 with 121,281 sqm of space, was not developed using BIM. In contrast, the new terminal expansion—bringing the total area to 382,394 sqm—has been designed in BIM 3D. To ensure consistency and operational efficiency, it is essential to bring the old terminal into the same digital framework. **Proposal:** The project involves conducting a comprehensive 3D survey of the existing terminal using advanced LiDAR and photogrammetry technologies. This includes capturing high-resolution point cloud data, processing it into a unified model, and developing a Level of Detail (LOD 350) BIM model. The scope also includes geo- referencing, conventional surveys, and quality assurance to integrate the model with the airport's digital twin. **Benefits:** Integrating the existing terminal into the BIM ecosystem will streamline facility management, improve asset tracking, and support predictive maintenance. It will also	6.6	Southern PTB	Basis of Rates to be provided
Perimeter Road	**Background:** The perimeter road at RGIA was constructed in 2007 and has been in continuous use since its handover to operations. Over time, signs of pavement distress have emerged due to aging and operational wear. **Proposal:** The project involves assessing and refurbishing damaged sections of the perimeter road to restore structural integrity and ensure safe, uninterrupted usage. **Benefits:** Refurbishment will enhance road safety, extend pavement life, and support reliable airport operations with minimal disruption	36.3	Existing Southern side Area	Length and Cost of Perimeter Road Repairing may be provided.
New central stores along with scrap yard	**Background:** As part of the airport's future expansion, the existing Central Store and Scrap Yard are scheduled for demolition per the master plan. This necessitates a new facility to continue uninterrupted store operations. **Proposal:** A new Central Store building will be constructed to house materials and scrap items, ensuring continuity in inventory management and operational support during and after the expansion.	14.1	General	Cost Basis , Size of building to be provided

General Capex Proposed by GHIAL for 4th Control Period				**APPENDIX-2**
INR in Crores				
Cargo Village Roads	**Background:** Road infrastructure is fundamental to the success of a cargo village, ensuring smooth connectivity with key transport hubs like airports, seaports, and railways. This connectivity is crucial for minimizing transit times and reducing costs, especially for time-sensitive cargo. **Proposal**: Developing robust internal and external road networks will support multimodal transport, streamline first- and last-mile delivery, and improve traffic flow within the cargo village. This will enhance safety and operational efficiency while supporting logistics functions such as warehousing and distribution. **Benefits:** Improved road infrastructure will attract logistics businesses, boost local employment, and contribute to economic growth. Environmentally, it can reduce fuel use	12	General	Length, Utility, Requirement and Cost Basis of Roads may be provided.
Others < 5cr	Other sustainance Capex	133.4		

Strategic Initiatives

Project	Project Description	Cost (INR Cr.)	Location	Details Required
Experience Centre Project - Physical and Digital infra cost (software + Hardware)	**Background:** The GMR Experience Centre (XC) is envisioned as a strategic initiative to enhance GMR's brand by showcasing its legacy, operational excellence, innovation, and future vision. It aims to create a strong emotional and intellectual connection with stakeholders. **Proposal:** The centre will feature immersive storytelling, interactive exhibits, and knowledge-sharing platforms. It will serve as a hub for stakeholder engagement, industry networking, and educational outreach, highlighting GMR's leadership and contributions. **Benefits:** XC will strengthen brand perception, foster trust, and position GMR as an industry thought leader. It will also inspire future talent, support community relations, and leave a lasting impression on visitors through impactful experiences.	10	General	Requirement of facility wrt airport ?

General Capex Proposed by GHIAL for 4th Control Period				APPENDIX-2
INR in Crores				
Master planning and preliminary design	**Background:** GHIAL is projected to reach 50 MPPA by FY 2031. Studies show the southern precinct can handle this capacity with targeted enhancements. To accommodate future growth beyond this threshold, expansion into the northern precinct is planned once 80% of southern capacity is utilized. **Proposal:** The next phase includes constructing a new terminal, runway, airside infrastructure, and dual Eastern Cross Taxiways (ECT) in the northern precinct. A comprehensive master plan and engineering design study will be undertaken, covering surveys, LiDAR, infra mapping, grading, airfield and terminal design, cargo facilities, and utility planning. This is also aligned with MoCA and AERA requirements under the concession agreement and MYTP filing. **Benefits:** This development will ensure GHIAL is equipped to meet future air traffic demand, support operational efficiency, and maintain service excellence. It also strengthens stakeholder confidence through strategic planning and readiness for scalable infrastructure growth	30	General	Furnish the Details. Lidar Survey Cost considered in Project Engg and Maintenance (6.6 Cr.)+ also included in Soft Cost (under preliminary and Other Costs)
Others < 5cr	Other sustainance Capex	43.3	Details Required	

Landscape				
Project	**Project Description**	**Cost (INR Cr.)**	Location	Details Required
Others < 5cr	Other sustainance Capex	27.8	Details Required	

IT				
Project	**Project Description**	**Cost (INR Cr.)**	Location	Details Required
Enterprise IT Capex	**Background:** The current enterprise IT infrastructure is aging and due for a refresh. Key systems, including servers, storage, and network components, are reaching end-of-life, impacting performance and reliability. **Proposal:** Allocate ₹10 crores for infrastructure technology upgrades and ₹15 crores for network refresh and miscellaneous IT enhancements under the Enterprise IT Capex plan.	30	General	Details and Basis of Cost to be provided.
Others < 5cr	Other sustainance Capex	46.5	Details Required	

ARFF				
Project	**Project Description**	**Cost (INR Cr.)**	Location	Details Required

General Capex Proposed by GHIAL for 4th Control Period				APPENDIX-2
INR in Crores				
Others < 5cr	Other sustainance Capex	8	Details Required	

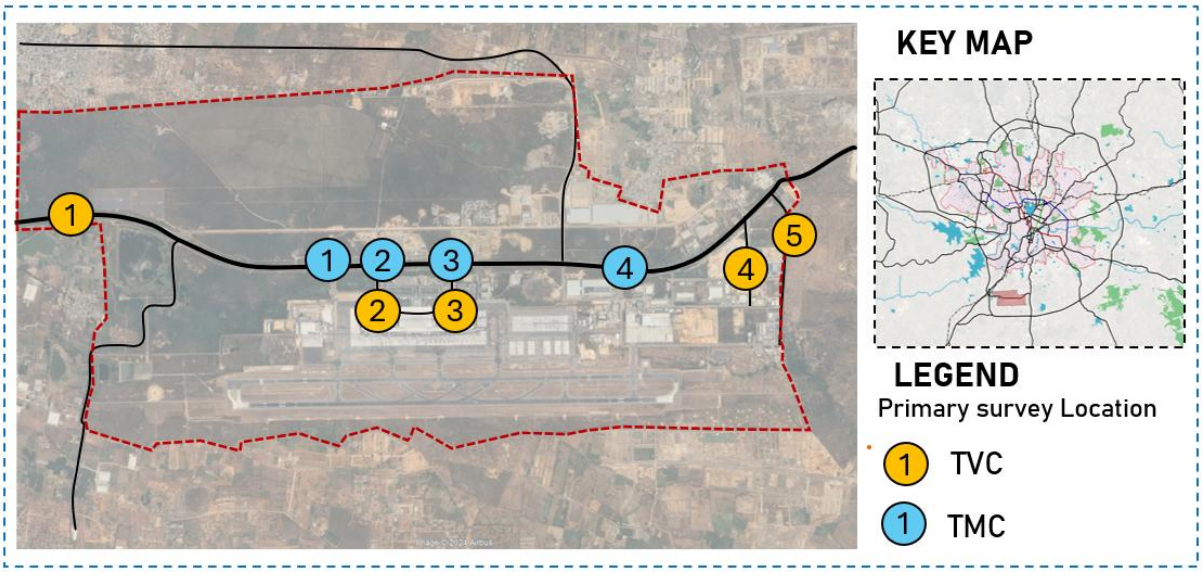
ANNEXURE-30 Submission by GHIAL - Note on Hyderabad Airport Transport Connectivity

Note on Airport Connectivity and Transport systems for GHIAL

- Rajiv Gandhi International Airport (RGIA) is geographically located south of Hyderabad at Shamshabad, approximately 24 kilometers from city center in the state of Telangana, India. RGIA plays a pivotal role in connecting the region to both national and international destinations. With rapid urban and economic expansion of Hyderabad, the airport's role as a strategic transport node is set to grow significantly.
- In response to projected growth, a comprehensive Transport Connectivity Master Plan study was carried out aiming to ensure congestion-free, safe, and efficient access to RGIA. The study addressed the challenges arising from an anticipated annual passenger handling capacity of 113 million passengers per annum (MPPA) by 2047 and cargo handling of 0.67 million tonnes per annum. Stage wise growth in passenger handling capacity and cargo for 2030, 2033, 2038 were carefully envisaged during the study. The primary objective is to develop a robust, phased transport infrastructure plan integrating public transport, road networks, and future regional growth.
- The study involved Traffic Volume Counts (TVC), Turning Movement Counts (TMC), Origin-Destination (O-D) surveys, passenger and employee interviews, speed and delay studies, parking surveys, and cargo movement in order to evaluate existing level of service of existing landside road infrastructure and existing travel pattern.
- Demand Estimation was segmented into Airport Passenger, Employee, Cargo categories, employing empirical data, CAPA projections, and modal share assumptions along with peak hour and directional distribution for stagewise estimated peak hour vehicular traffic.
- RGIA passenger traffic is projected growing from ~ 31 MPPA in 2025 to 113 MPPA by 2047. This growth is driven by several factors such as 1)Increasing Air Connectivity due to Hyderabad's rise as a global business and tourist hub is boosting air travel demand 2)Terminal Expansion - The upcoming Terminal 2, operational by 2030(September 2029), is expected to significantly enhance capacity and service levels 3)Socioeconomic Growth of the region leading to increased air travel tendency.
- Modal share analysis revealed that the current predominant mode of airport access is via taxis (74%) and private cars (24%), with negligible public bus usage (2%). For future projections a gradual modal shift by Metro is also considered. This is expected to absorb up to 10% of the airport passengers in future. However, the

Metro connectivity can be expected in a period of 5 years from the date of approval of Metro Rail project. It can be envisaged in 2031-32, if Metro rail project is approved in 2026.

- Significantly, the peak hour traffic is a very important factor which envisaged the improvement in road connectivity infrastructure. The assessment emphasized the urgent need for systematic interventions including lane widening, grade-separated interchanges, and optimized traffic management to bridge these capacity gaps and support future demand
- Critical intersections were also identified where the existing lane configurations and lane geometries are insufficient to handle the anticipated traffic flows, leading to potential bottlenecks and increased queuing.
- Main Access Road and North South Road are the only two prime networks providing access to the Airport. East-West road is an important arterial road connecting the access roads. Arrival & Departure ramp roads are the basic entry and exit for the passengers to reach terminal. Further, Cross taxiways also necessitate reasonable modifications in the landside road infrastructure. Road upgradation, Junction improvements, Grade separators and underpasses are planned phase wise to cater the present and future demand. In addition to the Air passenger vehicle traffic, Employee vehicles and Cargo vehicles, there is another important factor which is the through traffic vehicles which is passing through the Main Access Road from NH-44 to NH-765. Though it accounts for 5% of the total vehicle traffic, the future fast track development of the Airport region will be a potential factor for increase in this through traffic, which cannot be neglected. In order to ensure seamless timely journey of the Airport passengers it is essential for GHIAL to carry out capacity augmentation of the Road Infrastructure.
- **The traffic survey volume count carried out in the below locations:**

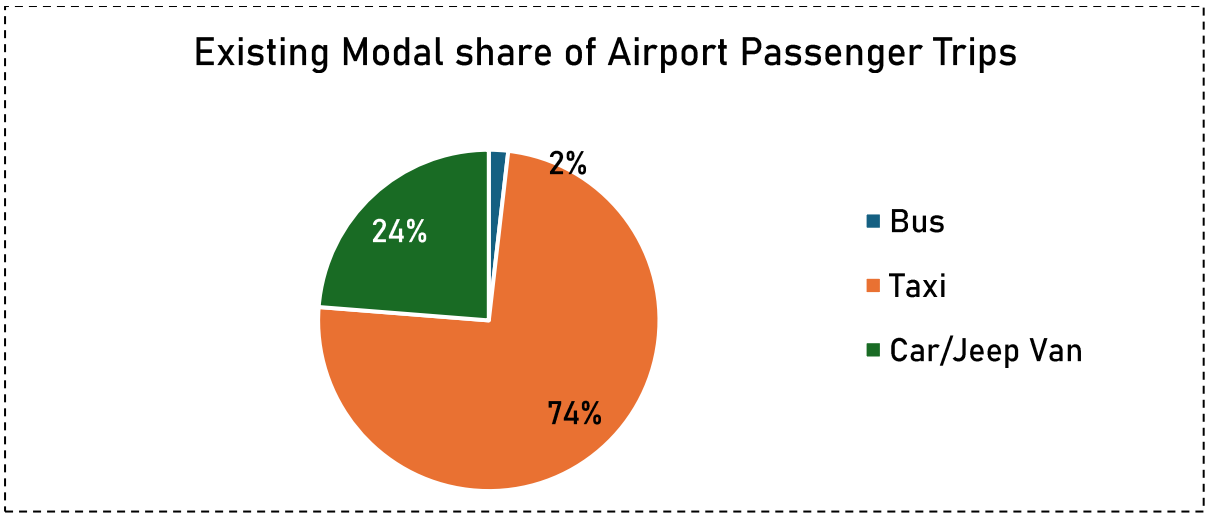


- **The peak hour traffic at these locations are as below:**

TVC Locations	DIRECTIONS	PEAK Hour count	
		Vehicular Count	Directional Split
1. Airport Approach Road (Betn. West Entry to Roundabout 1)	Roundabout No. 01 to Shamshabad	2134	55%
	Shamshabad to Roundabout No.01	1768	45%
2. Airport Arrival Ramp (down)	Arrival Block to Roundabout 2	337	100%
3. Airport Departures Ramp (up)	Roundabout 3 to Departures Block	1245	100%
4. Reliance Fuel Form Road	Airport Road to Reliance Fuel	10	32%
	Reliance Fuel to Airport Road	21	68%

- **Modal share of passenger trips:**

The table below illustrates the modal split for airport passengers, a dominant reliance on taxi services, accounting for a substantial 74% of all airport trips is observed. Cars and jeeps contribute 24% to the passenger modal share, indicating a significant portion of travellers still opt for private or semi-private vehicle modes. Notably, bus usage among passengers is minimal, representing only 2%. This distribution strongly infers that airport passengers prioritize convenience and direct access, with taxis being the overwhelming preferred choice, and public bus services playing a negligible role in their commute to and from the airport.



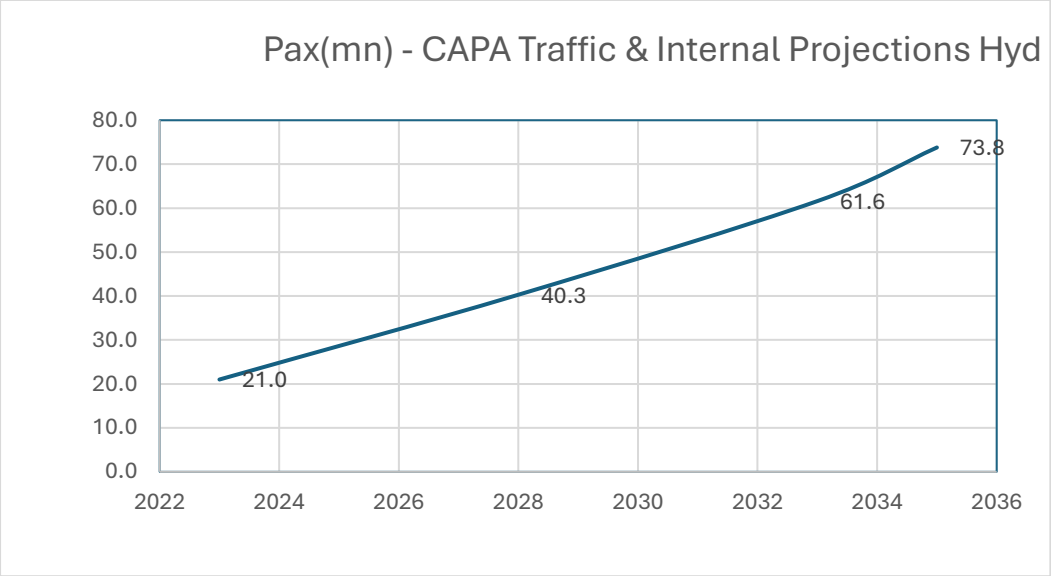
- **Level of services of the road network:**

The existing transport connectivity to Hyderabad Airport, as revealed by the data analysis, presents a mixed picture. Some of the key inferences are highlighted below-

- **Road Network Performance:** While the broader road network generally maintains acceptable Levels of Service (LOS A-C), critical segments directly serving the airport, such as the Airport Approach Road and parts of NH44, already experience significant congestion (LOS D) during peak hours.
- **Passenger Travel Patterns:** Airport passengers overwhelmingly prefer taxis (74%) and private cars (24%), highlighting a strong demand for convenient, direct access. Public bus usage remains negligible (2%).

- **Future Annual demand of Airport Passengers:**

The airport's passenger demand is projected to grow significantly, rising from over 21 million passengers per annum (MPPA) in the base year 2023 to an estimated 98.6 MPPA by 2042. This substantial increase culminates in a peak of 113 MPPA by 2047, indicating a strong upward trend in passenger traffic over the forecast period as shown in below figure:



Terminal-2:

Furthermore, the construction of Terminal 2 is scheduled to be completed by the financial year 2030(September 2029). Following the completion, Terminal 2 will commence operations within the same year. This development is expected to significantly enhance the airport's handling capacity, improve passenger experience, and support growing air traffic demands

- Projected Airport Passenger Demand (MPPA)

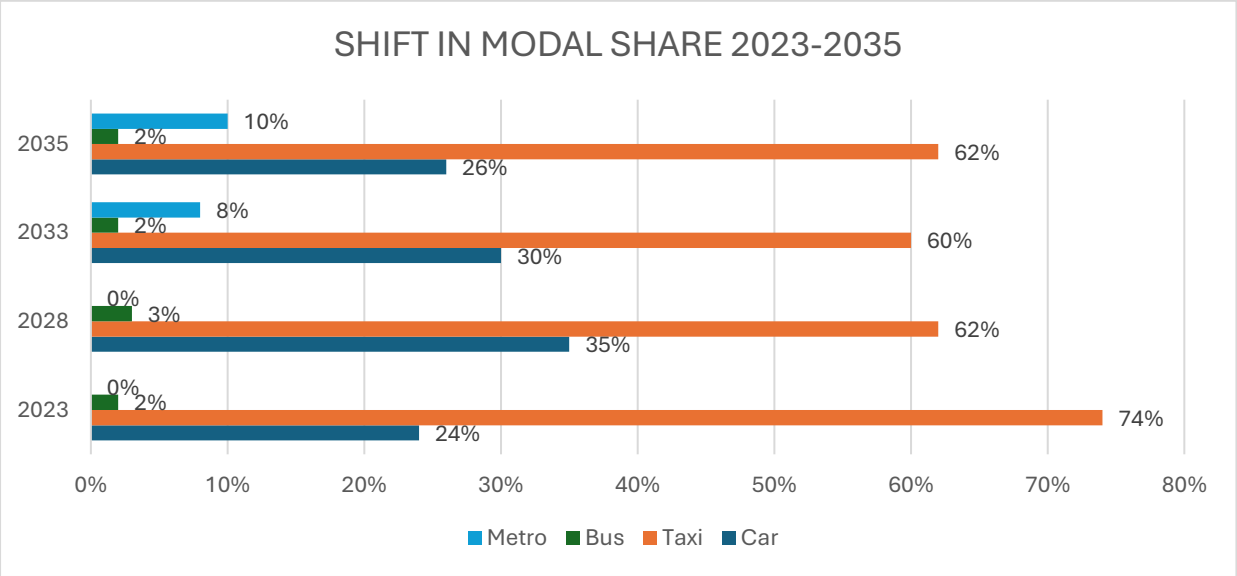
Year	PAX(mn) - CAPA TRAFFIC & INTERNAL PROJECTIONS HYD	Daily Passenger Demand	Demand excluding transfer passengers	Demand considering Meeters and greeters
2023	21.0	57535	43151	64726

Year	PAX(mn) - CAPA TRAFFIC & INTERNAL PROJECTIONS HYD	Daily Passenger Demand	Demand excluding transfer passengers	Demand considering Meeters and greeters
2028	40.3	110410	76712	123659
2033	61.6	168767	114493	185644
2035	73.8	202192	149622	220389

The above table represents the yearly projections for airport passengers estimates of Hyderabad airport from the year 2023 till 2035, wherein the passenger Demand is estimated to cater 73.8 million passengers per annum in 2035. Daily passenger Demand is calculated considering 35% of transfer passengers share and 0.5 times of passenger trips for calculating the meters and greeter's ratio. Terminal 1 and Terminal 2 share is considered based on operational characteristics of upcoming Terminal 2 Construction, which is assumed to be completed in FY2030(September 2029).

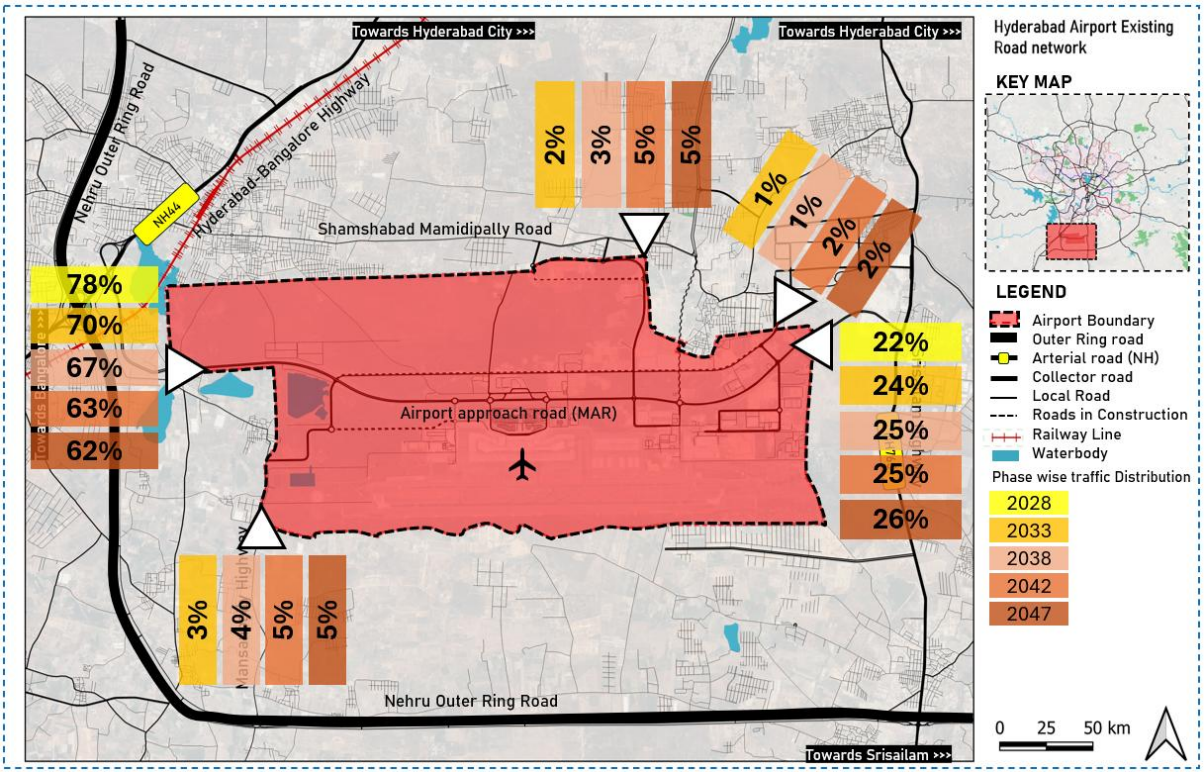
- **Modal Share assumptions on traffic projection:**

The projection of future traffic for Hyderabad Airport critically depends on the assumptions regarding modal share, particularly for airport passenger trips. The current modal share for airport passenger trips is derived directly from primary surveys, specifically the Origin-Destination (OD) survey conducted at RGIA. As per the analysis, taxis constitute most passenger trips, accounting for 74% of the share, followed by cars/jeep vans at 24%, with bus usage being a marginal 2%.



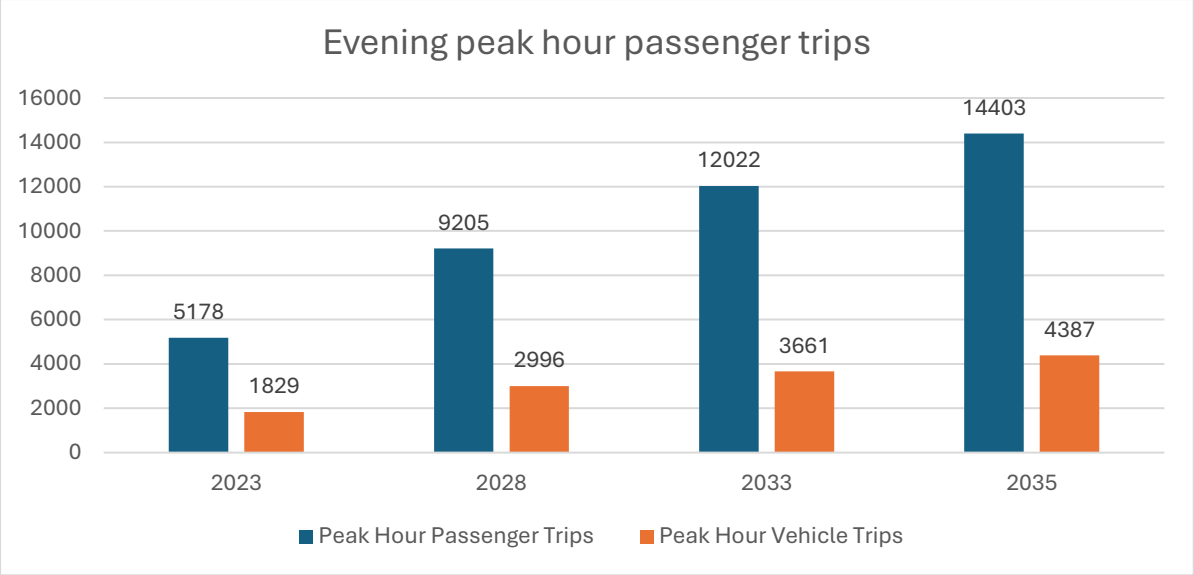
- **Traffic Distribution**

To effectively plan for future connectivity, the directional distribution of traffic for airport passenger trips has been assessed, considering the HADA 2031 Plan and forthcoming developments. As per primary survey data from 2023, the western side currently accounts for the majority of airport passenger traffic, contributing 80% of total trips. The eastern side follows with a significantly smaller share of 20%, while the northern and north-eastern directions contribute negligible percentages.



- **Estimated Peak Hour Vehicular trips for Airport Passengers**

The below Table illustrates the projected growth in both daily passenger demand and the resulting vehicular trips during the evening peak hour, extending from 2023 to 2047. A clear upward trend is evident across all metrics. Daily passenger trips are forecasted to rise significantly, from 5,178 in 2023 to a substantial 18,363 by 2047, indicating a nearly fourfold increase in passenger volume over this period.



Crucially, the chart also estimates the resulting vehicular demand. Peak Hour Vehicular trips are expected to increase from 1,829 in 2023 to 5,522 by 2047. This direct translation of passenger demand into vehicular trips highlights the immense pressure that will be placed on the airport's road infrastructure.

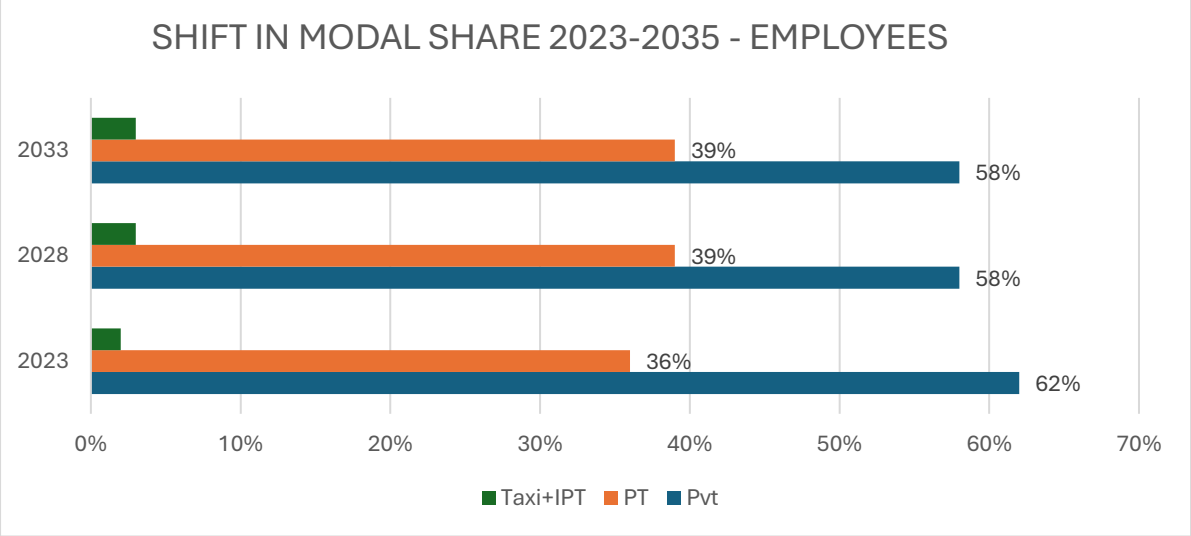
Year	PAX(Mn) - CAPA TRAFFIC & INTERNAL PROJECTIONS HYD (MPPA)	Demand after considering transfer passengers & Meeters/Greeters	Peak Hour Passenger trips	Peak Hour Veh Trips
2023	21.0	64726	5178	1829
2028	40.3	115068	9205	2996
2033	61.6	171740	12022	3661
2035	73.8	205754	14403	4387

- **Annual Demand for Airport, Airlines, Ground Handlers, and Other Employees for Expected passenger handling**

The demand estimation for employee trips is a critical component of the overall transport connectivity plan for Hyderabad Airport, as employees constitute a significant and consistent source of daily traffic. The methodology begins by projecting the total number of employees for the horizon year 2033, which is directly linked to the expected passenger demand. This correlation is based on the principle that as passenger traffic grows, so does the operational need for a larger workforce. the Figure given below indicates an increase in "No. of Employees" from 21,000 in 2023 to 59,700 by 2033, mirroring the projected growth in annual passenger demand (PAX (MN) - CAPA and Internal Traffic Projections HYD).

- **Modal Share assumptions for Employees:**

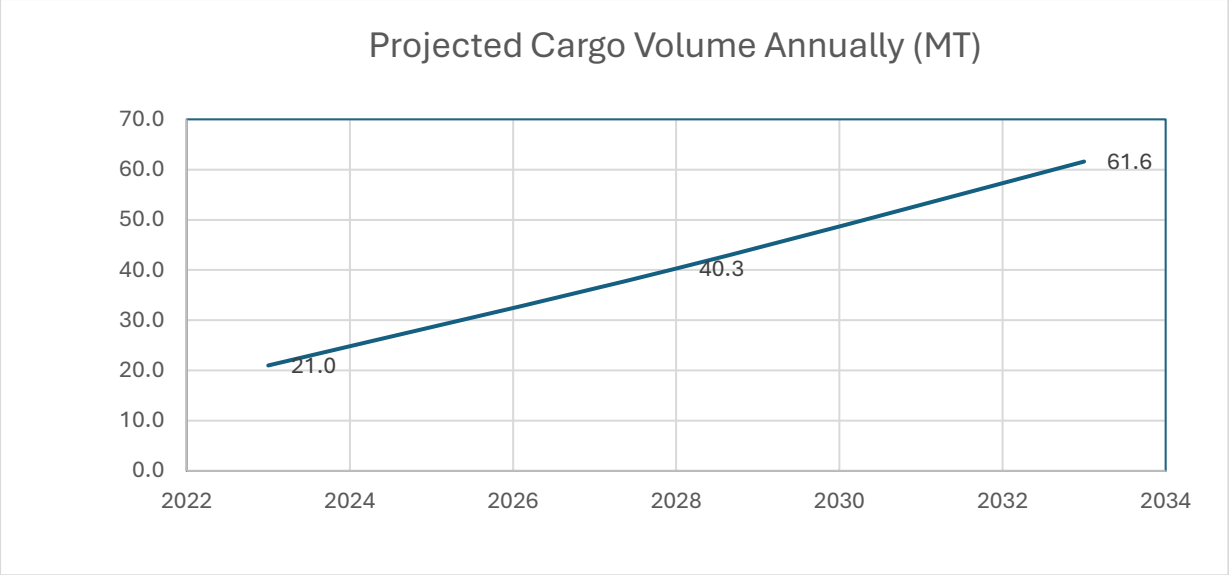
The modal share for employees is particularly influenced by factors such as the availability of company-provided transport, public transport options, and the prevalence of private vehicle ownership. With the upcoming proposed metro corridor, it is envisaged that conventional public transit (Bus and Company provided buses) ridership will shift to Metro.



- **Annual Demand for Airport Cargo Handling (in Tonnage)**

  Cargo operations represent a crucial revenue stream for airports, thereby necessitating that the accessibility of freight vehicles to and from the cargo terminal is a paramount consideration in future cargo traffic forecasting and planning. The overarching efficiency of the cargo terminal is directly contingent upon the seamless dispatch of both imported and exported goods, which in turn significantly impacts cargo handling times and underscores the need for continuous internal operational enhancements.

  This section focuses on projected future volume of cargo handled at Hyderabad Airport and its subsequent translation into vehicular trips. This estimation is crucial for understanding the impact of freight movement on the airport's road infrastructure. The methodology begins with the "Daily Cargo Tonnage," which serves as the primary input for forecasting. For the horizon year 2047, the daily cargo tonnage is considered based on the expected demand provided by the Cargo team, ensuring that projections align with operational forecasts



- **Traffic estimation for Airport Cargo Trips:**

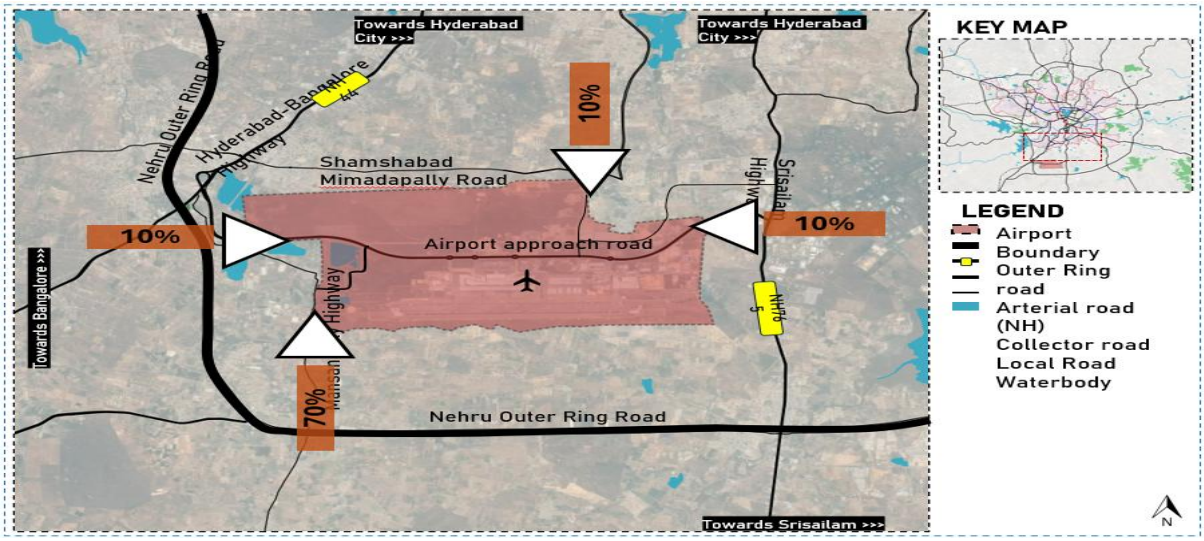
The Table below indicates a notable shift in the composition of vehicles handling cargo over time. In the existing freight vehicular composition 2023 as per the primary survey, Light Commercial Vehicles & Tempo dominate with a 90% share, while 2-Axle Trucks, 3-Axle Trucks, and Multi-Axle Trucks constitute much smaller proportions at 3%, 3%, and 4% respectively. However, by the horizon year 2047, a significant shift is projected, the share of LCV/Tempo is expected to decrease substantially to 66%, reflecting a move towards larger capacity vehicles. Correspondingly, 2-Axle Trucks are forecasted to increase to 11%, 3-Axle Trucks to 14%, and Multi-Axle Trucks to 9% (provided by Cargo Handling Team of GMR-HIAL)

	LCV/ Tempo	2-Axle Trucks	3 Axle Trucks	Multi Axle Trucks
EXISTING VEH COMPOSITION *	90%	3%	3%	4%
2028	85%	4%	6%	5%
2033	80%	6%	8%	6%
2038	75%	8%	10%	7%
EXPECTED MODE SHARE-2047*	66%	11%	14%	9%

- **Cargo Directional Distribution Considerations:**

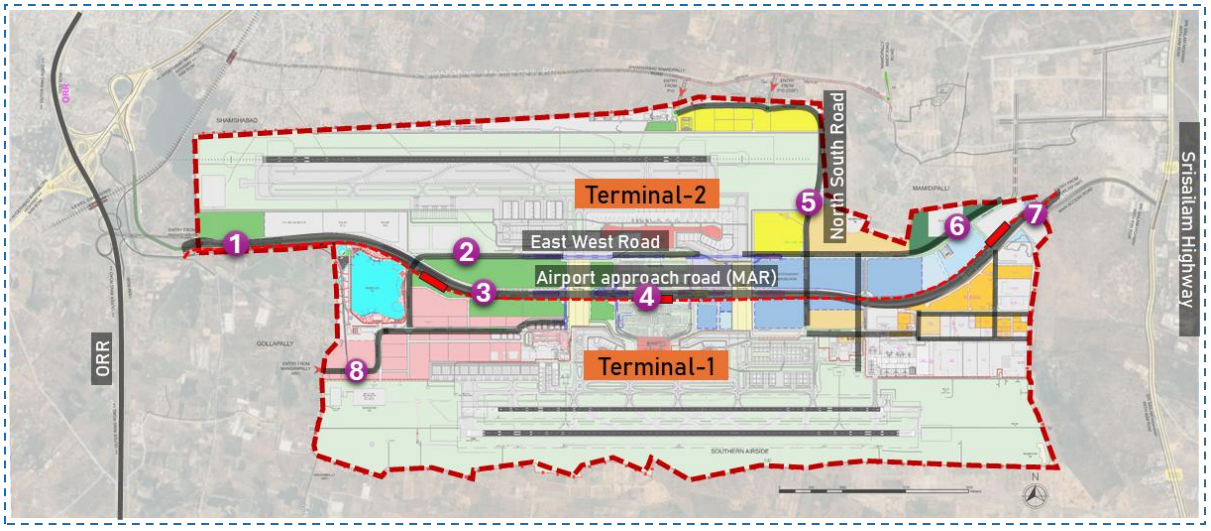
The Figure 5 12 specifically illustrates the directional distribution of cargo freight traffic around Hyderabad International Airport. It clearly indicates that the Mansanpally Highway will serve as the predominant corridor for cargo movement, accounting for a significant 70% of all freight traffic. This substantial share is directly attributed to its

strategic proximity and anticipated dedication to the airport's cargo area. The remaining freight traffic is distributed with 10% utilizing the Nehru Outer Ring Road towards Bangalore and another 10% accessing the airport via the Srisailam Highway. This highly concentrated directional distribution highlights the critical importance of the Mansanpally Highway for future cargo logistics, necessitating robust infrastructure planning.



- **Phase wise Traffic Assignment for Critical Peak Hour**

Based on the demand estimation from the above, the traffic volumes were assigned to the coded road network to evaluate infrastructure requirements. The assigned traffic volumes, measured as cross-sectional traffic in PCU/hr, show a significant increase over the various phasing years, reflecting the overall growth in traffic from all sources.



In above figure, demonstrated the midblock and ramp locations where the assigned traffic for different phases has been evaluated. 8 mid-block locations along with two ramp locations for Terminals have been detailed out.

Gap Assessment

- **Required Lane Configurations as per the Demand Estimation**

Based on the traffic analysis, the required lane configurations for various mid-block locations were determined to ensure smooth traffic flow and a Level of Service (LOS) C. This determination was guided by Volume/Capacity (V/C) planning parameters, with the methodology adhering to the Indo-HCM, 2017 Guidelines for Urban Road capacities based on higher speeds considering Airport roads. The data provides a clear, phase-wise roadmap for infrastructure upgrades, directly linking the growth in forecasted traffic to the necessary capacity enhancements on the road network.

Mid-Block Location	Required Lane Configuration for level of service C (v/c ratio 0.75 or below)				
	2028	2033	2038	2042	2047
1	4 lanes + 4 lanes	5 lanes + 5 lanes	5 lanes + 5 lanes	5 lanes + 5 lanes	6 lanes + 6 lanes
2	2 lanes + 2 lanes	3 lanes + 3 lanes	3 lanes + 3 lanes	4 lanes + 4 lanes	4 lanes + 4 lanes
3	4 lanes + 4 lanes	4 lanes + 4 lanes	5 lanes + 5 lanes	5 lanes + 5 lanes	5 lanes + 5 lanes
4	3 lanes + 3 lanes	4 lanes + 4 lanes	4 lanes + 4 lanes	4 lanes + 4 lanes	5 lanes + 5 lanes
5	2L Undivided	2 lanes + 2 lanes	2 lanes + 2 lanes	3 lanes + 3 lanes	3 lanes + 3 lanes
6	2 lanes + 2 lanes	3 lanes + 3 lanes	3 lanes + 3 lanes	4 lanes + 4 lanes	4 lanes + 4 lanes
7	3 lanes + 3 lanes	3 lanes + 3 lanes	4 lanes + 4 lanes	4 lanes + 4 lanes	4 lanes + 4 lanes
8	2L Undivided	2 lanes + 2 lanes	2 lanes + 2 lanes	2 lanes + 2 lanes	3 lanes + 3 lanes

Roads	2023	2028	2033	2038	2042	2047
MAR	2 lanes + 2 lanes	4 lanes + 4 lanes		5 lanes + 5 lanes*	6 lanes + 6 lanes	
East west Road	2 lanes + 2 lanes		3 lanes + 3 lanes **		4 lanes + 4 lanes	
North South Road	2 lanes + 2 lanes		2 lanes + 2 lanes ***		3 lanes + 3 lanes	
T 1 Departure Ramp	3 lane					
T1 Arrival Ramp	3 lane					
T 2 Departure Ramp	-	-	3 lanes			
T 2 Arrival Ramp	-	-	3 lanes			

The Main Access Road (MAR) will be preponed to a 6 lane + 6 lane configuration by 2038, coinciding with flyover construction and minimizing the construction phases.

** - Lane Configuration for East West Road is preponed to 2030 from 2042 to 4 lanes + 4 lanes configuration considering that Road construction will get in sync with terminal 2 construction as the East West Road will become a part of Airside Operations.

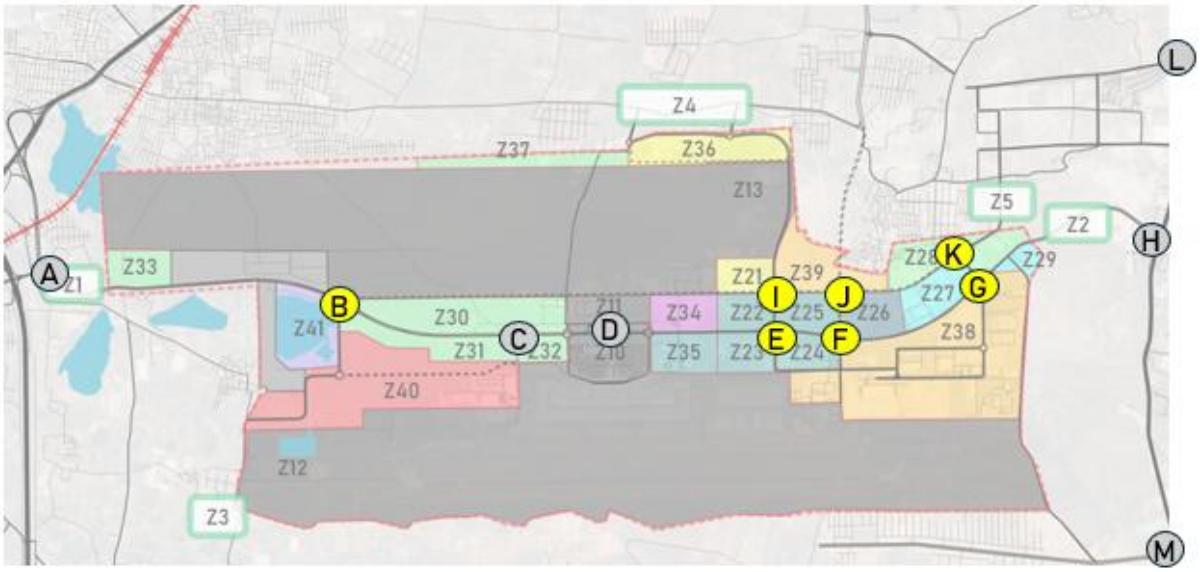
*** - Due to underpass extension of east west road near North South Road Intersection, Lane configuration for North South Road is also preponed to 2030 from 2042 to 3 lanes + 3 lanes configuration.

Recommended Proposals (Internal and External)

Based on the recommended infrastructure phasing, the Main Access Road (MAR) and surrounding junctions will undergo significant upgrades to handle the increasing traffic demand. The plan for MAR includes a phased expansion from its current configuration to 6 lanes + 6 lanes by 2038. This is strategically timed to coincide with the construction of a flyover, which will minimize traffic disruption from multiple construction phases.

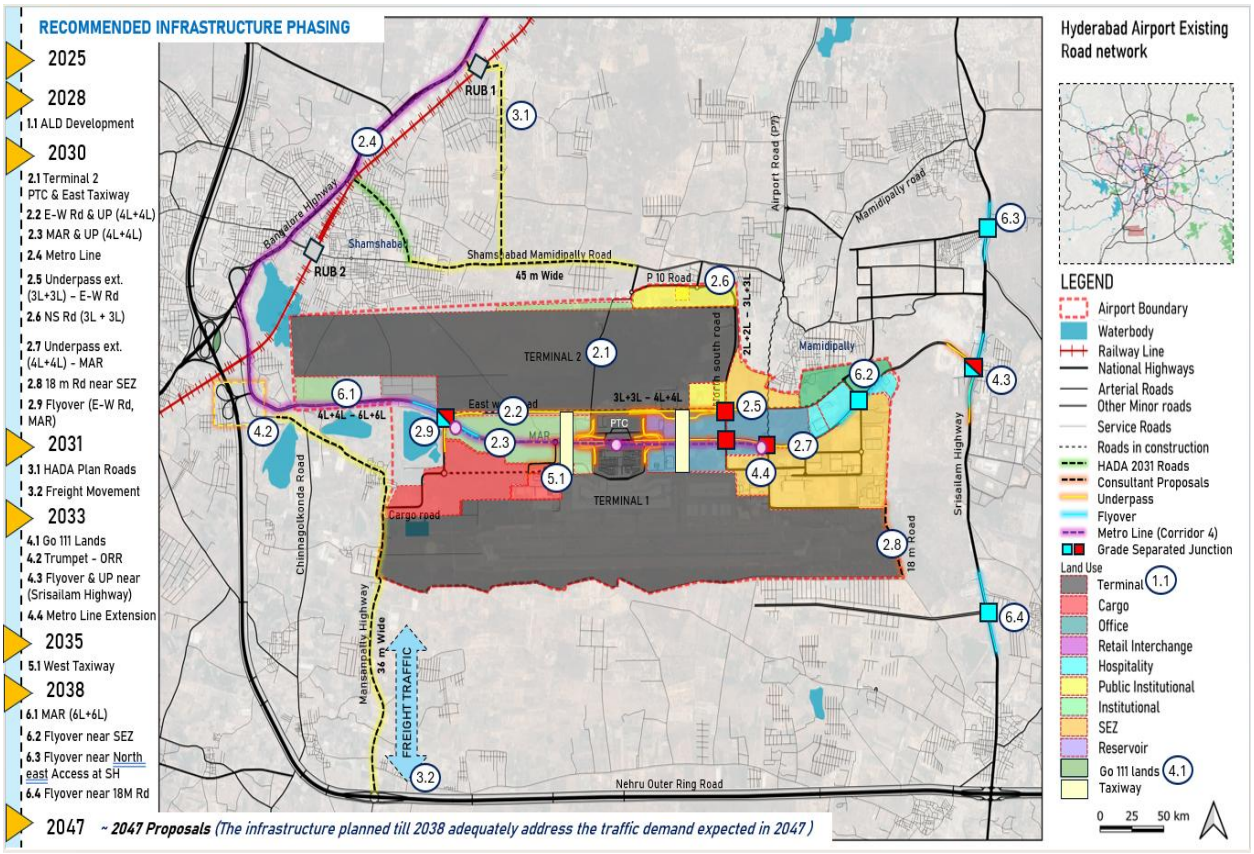
The figure in the page 13 and 15 describes all the proposals in detail for different phasing years considering the estimated Demand for 2047, wherein the blue squares represent flyovers, while red squares represent underpasses at key intersections. Further detailing the phased plan, the East West Road is proposed to be widened to a 4 lanes + 4 lanes configuration by 2030, a preponed timeline from the initial 2042 plan. This upgrade is crucial as the road will become part of the airside operations, and the accelerated schedule aligns with the construction of Terminal 2. Similarly, the North South Road will also be preponed to a 3 lanes + 3 lanes configuration by 2030 to accommodate the underpass extension of the East West Road near their intersection.

The green-coloured roads on the map represent the HADA roads, wherein yellow-coloured roads are priority roads within HADA – 2031 plan. The infrastructure phasing plan also addresses key intersections with significant upgrades. For example, Junction B will be upgraded to a Flyover + Underpass by 2033 to handle the projected traffic volume. Junctions E and F, which are currently unsignalized and roundabouts respectively, will be upgraded to signalized intersections by 2033 and eventually become Grade Separated by 2042. These detailed plans, which also include new links and trumpet interchanges, are designed to create a comprehensive and efficient transport network that can support the long-term growth of the airport and its surrounding areas.



Required Intersection upgradation as per optimum phasing

Junctions		*Existing*	*2028*	*2033*	*2038*	*2042*	*2047*
A	MAR to ORR Link	X		Trumpet connecting with ORR			
B	MAR & E-W Rd	Unsignalized	Roundabout	Flyover + Underpass			
C	MAR & Cargo Rd	Roundabout		Underpass + roundabout (at grade)			
D	Terminal Ramps	Roundabout		Underpass Ramps of T1 & T2			
E	MAR & N-S Rd	Unsignalized / Roundabout		Underpass + Roundabout (at grade)			
F	MAR & SEZ Rd	Roundabout		Underpass + Roundabout (at grade)			
G	MAR & GMR Aerospace Rd	Unsignalized	Roundabout		Flyover + Roundabout (at grade)		
H	MAR & Srisailam Highway	Unsignalized	Signalized Jn	Grade Separated (Underpass from MAR to Srisailam Highway (Right Direction) + Flyover at Srisailam Highway (Straight Direction)			
I	N-S Rd & E-W Rd	Unsignalized	Roundabout	Underpass + Roundabout (at grade)			
J	SEZ Rd & E-W Rd	X	Roundabout				
K	GMR Aerospace Rd & E-W Rd	Unsignalized	Roundabout				
L	Srisailam Highway & TGIIC Road	Unsignalized			Grade Separated		
M	Srisailam Highway & golf Course Rd	Unsignalized		Signalized Jn	Grade Separated		


RECOMMENDED INFRASTRUCTURE PHASING
2025
2028
1.1 ALD Development
2030
2.1 Terminal 2 PTC & East Taxiway
2.2 E-W Rd & UP (4L+4L)
2.3 MAR & UP (4L+4L)
2.4 Metro Line
2.5 Underpass ext. (3L+3L) - E-W Rd
2.6 NS Rd (3L + 3L)
2.7 Underpass ext. (4L+4L) - MAR
2.8 18 m Rd near SEZ
2.9 Flyover (E-W Rd, MAR)
2031
3.1 HADA Plan Roads
3.2 Freight Movement
2033
4.1 Go 111 Lands
4.2 Trumpet - ORR
4.3 Flyover & UP near (Srisailam Highway)
4.4 Metro Line Extension
2035
5.1 West Taxiway
2038
6.1 MAR (6L+6L)
6.2 Flyover near SEZ
6.3 Flyover near North east Access at SH
6.4 Flyover near 18M Rd
2047
~ 2047 Proposals (The infrastructure planned till 2038 adequately address the traffic demand expected in 2047)
RUB 1
RUB 2
Shamshabad
Bangalore Highway
Shamshabad Mamidipally Road
45 m Wide
P 10 Road
Airport Road (PP)
Mamidipally road
Mamidipally
TERMINAL 2
TERMINAL 1
PTC
MAR
East west road
3L+3L - 4L+4L
2L+2L - 3L+3L
4L+4L - 6L+6L
Cargo road
Chinnagolkonda Road
Mansanpally Highway
36 m Wide
FREIGHT TRAFFIC
Nehru Outer Ring Road
18 m Road
Srisailam Highway
Hyderabad Airport Existing Road network
LEGEND
Airport Boundary
Waterbody
Railway Line
National Highways
Arterial Roads
Other Minor roads
Service Roads
Roads in construction
HADA 2031 Roads
Consultant Proposals
Underpass
Flyover
Metro Line (Corridor 4)
Grade Separated Junction
Land Use
Terminal
Cargo
Office
Retail Interchange
Hospitality
Public Institutional
Institutional
SEZ
Reservoir
Go 111 lands
Taxiway
0 25 50 km

ANNEXURE-31
Submission by GHIAL - ITC works estimate GHIAL North present

Note on Cost of IT Works
Project : Development of Northen Present at RGIAL, Shamshad

This note is prepared to derive the cost estimate for IT &C works for development of Northen Present at RGIAL.

Ref : Most recent IT&C- DBFOT contract signed with M/s WASIL Limited for development of IT&C works at Bhogapuram Airport is considered

The Overall CAPEX investment by WASIL limited under DBFOT contract is Rs. 141.42 Crores and work was scheduled to be competed by April 2026.

Terminal Area	SQM		66,500
Capacity			6 MPPA
Cost of WAISL	INR		1,41,42,00,000
Cost per MPPA	INR		**23,57,00,000**
Cost per Sqm	INR		21,266
Year of Capex incurred			2025-2026
GHIAL - North side development timelines			2026-2030
Escalation	6%		for 4 Years
Present Price×(1+r)^n		**26,848**	**Per Sqm**

Proposed cost for GHIAL

	Terminal Area	Escalated Rate Per Sqm	Cost
Northen present - IT Development cost	226568.00	26848.04	**6,08,29,07,602**
Additional cost for Control centre office block for AAI on North side	3000.00	26848.04	**8,05,44,132**
IT&C works for expansion of AOCC / APOC , Augmentation and modification of existing IT&C system			**19,00,00,000**
TOTAL			**6,35,34,51,733**
		Say	**635.53 Crores**

ANNEXURE J

CAPITAL EXPENDITURE PROJECTIONS

Summary of IT CAPEX Schedule (FY 2024 – FY 2064):

This is just an indicative projection of the CAPEX schedule.

The capital expenditure incurred by the IT Concessionaire for expansion to Stage 2 (11.5MMPA) and onwards of the Airport shall be subject to periodic review by GVIAL and the IT Concessionaire to assess and mutually agree on the varied fixed cost component.

S.No.	Financial Year	Initial CAPEX (in INR Cr.)	Tech Refresh of Initial Capex	Total Capex (in INR Cr.)
1	FY25	60.58	0	60.6
2	FY26	80.84	0	80.8
3	FY27		0	0
4	FY28		0	0
5	FY29		0	0
6	FY30		0	0
7	FY31		0	0
8	FY32		0	0
9	FY33		0	0
10	FY34		117.5	117.5
11	FY35		0	0
12	FY36		0	0
13	FY37		0	0
14	FY38		0	0
15	FY39		0	0
16	FY40		0	0
17	FY41		0	0
18	FY42		137.6	137.6
19	FY43		0	0
20	FY44		0	0
21	FY45		0	0
22	FY46		0	0
23	FY47		0	0
24	FY48		0	0
25	FY49		0	0
26	FY50		161.7	161.7

GVIAL

WAISL

27	FY51		0	0
28	FY52		0	0
29	FY53		0	0
30	FY54		0	0
31	FY55		0	0
32	FY56		0	0
33	FY57		0	0
34	FY58		188.9	188.9
35	FY59		0	0
36	FY60		0	0
37	FY61		0	0
38	FY62		0	0
39	FY63		0	0
40	FY64		0	0

It is clarified that:

i) The IT Concessionaire shall undertake the CAPEX Incurred, for initial CAPEX period i.e., FY 25 and FY 26, for the development amounting to INR 141.42 Crores (Rupees One hundred, forty-one crores and forty-two lakhs only) as stated in table herein above. The IT Concessionaire agrees that such amount indicated above is a fair estimate and reasonable sum to develop the Airport IT assets during initial CAPEX period,- development plan and it assures GVIAL to design, finance, build the IT Assets and IT Works as per the IT CAPEX Schedule and comply to the terms of this Agreement.
ii) Refresh of IT Systems cost will be incurred as per end of life and end of service (EOL/EOS) of the systems.

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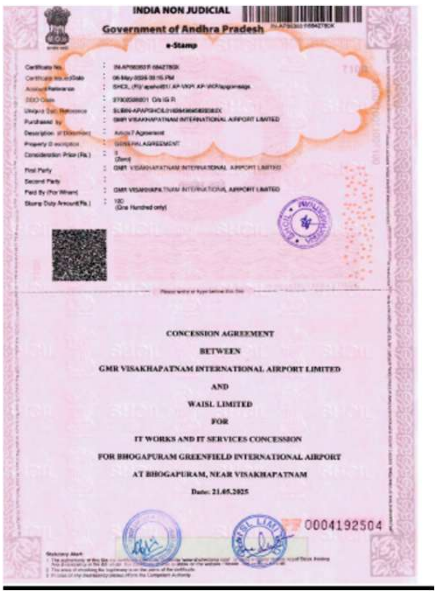

INDIA NON JUDICIAL

Government of Andhra Pradesh

e-Stamp

CONCESSION AGREEMENT

BETWEEN

GMR VISAKHAPATNAM INTERNATIONAL AIRPORT LIMITED

AND

WAISL LIMITED

FOR

IT WORKS AND IT SERVICES CONCESSION

FOR BHOGAPURAM GREENFIELD INTERNATIONAL AIRPORT

AT BHOGAPURAM, NEAR VISAKHAPATNAM

Date: 21.05.2025

0004192504

ANNEXURE-32
Submission by GHIAL - Soft costs justification

Soft Cost Justification

The proposed additional costs over the base (direct) construction cost for this large infrastructure project—Preliminaries & Other costs at 2%, Permits, Insurance etc. at 2%, and Design & PMC (Project Management Consultancy) at 5%, plus Contingencies at 5%—are reasonable and well-aligned with industry standards and practices for major infrastructure projects (e.g., roads, bridges, dams, utilities, or large-scale civil works). These percentages are typically applied as mark-ups on the base cost (often the direct labor, materials, and equipment costs) to arrive at the total estimated project cost.

Below is a detailed justification, supported by market references, industry guidelines, academic/research sources, and typical ranges from construction cost estimation literature.

1. Preliminaries & Other Costs (Proposed: 2%)

Preliminaries (also called site overheads, general conditions, or preliminaries/general items) cover temporary facilities, site management, mobilization, temporary utilities, site offices, safety measures, cleaning, traffic management, and other non-direct construction activities which are typically not covered under the EPC or lumpsum prices and either caried out by the Employer as pre activity or as pre award works or as support work during the construction.

Typical Range: For large infrastructure/civil projects, preliminaries often range from 3-10% of the total construction cost, but lower percentages (around 2-6%) are common when focused narrowly on site-specific items, especially in major projects where economies of scale reduce the relative impact.

References:

- Studies on civil infrastructure works indicate preliminaries between 3.25% and 6.5% (compared to higher in buildings.
- RICS (Royal Institution of Chartered Surveyors) *Third Edition*, RICS, London, published June 2022. (ICMS provides the global framework for classification of construction and civil engineering project costs, including treatment of preliminaries/general project overheads.). ICMS guidelines classify preliminaries under general overheads depending on the maturity of the design with items like site management, plant, temporary works, road connectivity required for development, dismantling of existing assets to make way for new construction, barrications commonly 2-8% depending on project scale.
- For large projects, lower percentages (e.g., 2%) are justifiable when the base cost is high, and preliminaries are efficiently managed or partially included in contractor bids.
- The cost also involves conducting pre site survey (topo) and OLS survey, Geo technical investigation, utility survey and some of the feasibility designs prior to masterplan development.

Justification: This is conservative and reasonable for a large infrastructure project, where fixed site setup costs dilute over a high base cost. It aligns with lower-end industry allowances and avoids overestimation.

2. Permits, Insurance etc. (Proposed: 2%)

This category typically includes statutory permits, licenses, application fees, builder's risk insurance, third-party liability insurance, bonds (e.g., performance/payment bonds), and related regulatory costs.

Typical Range: 1-5% of construction cost, often bundled under overheads or soft costs.

References:

- Overhead costs (including administrative, permits, insurance, and utilities) commonly range 5-10%, with permits/insurance as a subset often 1-3%.
- Regulations, permits, and associated costs are frequently cited at 2% in construction estimate guides. The permit costs such as Environmental clearance cost, public hearing, cost of managing any PLI / Litigations, cost towards obtaining local pollution control board approval etc
- Specific cost towards removal of tress and required forest clearance and cost of re-plantation
- Cost towards fire approvals, fuel and explosive licenses (fuel hydrant), Sate power distribution authority cost , CEA cost etc.
- Specific cost also required to be paid on total development area of terminal and other buildings and for the airside and landside towards municipal or NAC / HUDA charges typically applied on gross development area and overall site area. This may be in the range of approx. 1% of the construction cost.
- Insurance during construction (e.g., CAR Policy) and permits are minor relative to total cost but essential; combined with bonds, 1% is a standard allowance.
- Insurance for material in transit imported materials would be in the range of 0.25% of the project cost.

Justification: This is a prudent and commonly used figure for large infrastructure, where permitting complexity (environmental, land, utilities) exists but is not disproportionately high compared to the project scale.

3. Design & PMC (Project Management Consultancy) - Proposed: 5%

This covers architectural/engineering design fees, detailed engineering, and project management/consultancy services (PMC), including supervision and oversight.

Typical Range: 3-10% (or 5-15% including engineering), with lower percentages for very large projects due to economies of scale.

References:

- GHIAL developed 34 MPPA terminal with actual PMC cost ~4.5%.
- Design and engineering fees often 5-15%, with project management fees 3-8%.
- For large infrastructure, PMC fees tend toward 3-5%, while comprehensive design/consultancy can reach 5-10%.
- The Design cost convers master plan development, architecture, structural engineering, MEP system, design, overall integration of all design in BIM LOD 350 and providing specifications and tender designs. Further the design also covers providing structural stability certificate, 3rd party check by any IIT etc for terminal, airside, city side and the elevated cross taxiway. Approx 2.5 to 3.5% for the project of this size.

- Project management cost: The Project manager is required to be on board at the design development stage and shall be in place till completion and small remainder of team will be deployed during the DLP to support the Employer. Typically the market cost for PMC for the large project would be between 3 to 5% based on the size, spread and desired size of the organogram and specialization required by the client.
- The PMC cost also involves a separate 3rd party for specific material testing, equipment testing by accredited labs.

Justification: This is reasonable and mid-range for large infrastructure, covering both design development and independent PMC to ensure quality and risk mitigation.

4. Contingencies (Proposed: 5%)

Contingencies provide a buffer for unforeseen risks, such as design changes, site conditions, quantity risk, price fluctuations, delays, or unknown ground issues.

Typical Range: 5-10% for medium-risk projects; 5-15% (or higher early on) for infrastructure due to uncertainties (e.g., geotechnical, regulatory).

References:

- Most sources recommend 5-10% of hard costs for contingencies in standard projects, with 3-10% or 5-10% common. Early phases may use higher (10-20%), reducing to 5% as details firm up.
- For infrastructure/high-risk: 10-15% in some cases, but 5% is standard at later estimate stages (e.g., construction documents phase: 5-10%).
- AACE International recommended practice no. 40R-08, 41R-08 and 119R-21 guidelines and studies emphasize risk-based contingencies, often 5% as a baseline for well-defined large projects.
- As this project is currently under masterplan level and design development is still under way, design related and quantity related risk would be typically between 2 to 3% included under this head.

Justification for 5%: This is conservative yet adequate for a large infrastructure project with a derived base cost (implying reasonable definition), providing protection without inflating the estimate excessively.

ANNEXURE-33
Submission by GHIAL - Details of Other Sustainance Capex under General Capex

Fwd: RE: General capex at hyderababd airport

prasad.pradeeprao < prasad.pradeeprao@rites.com >

ANIL ASWANI < anilaswani@rites.com >

Fri, 12 Jun 2026 9:52:15 AM +0530

To "vivek.kumar02 vivek.kumar02"<vivek.kumar02@rites.com>

Cc "Prasad Deshmukh"<prasad.pradeeprao@rites.com>

1 Attachment(s)

List of Capex less 5 Cr.xlsx
55.2 KB

Dear Vivek/ Prasad,

Please take necessary action as per trailing mail of AERA.

Regards,

Anil Aswani
GM/C/AP-RITES
Mob: 98106 55011

========== Forwarded message ==========
From: rajan gupta <rajan.gupta1@aera.gov.in>
To: "ANIL ASWANI"<anilaswani@rites.com>
Cc: "RAM KRISHAN"<director-ps@aera.gov.in>, "Shyam Dhar Tiwari"<srconsultant-capex1@govcontractor.nic.in>
Date: Thu, 11 Jun 2026 20:31:28 +0530
Subject: Fwd: RE: General capex at hyderababd airport
========== Forwarded message ==========

Sir,

Please examine the details given by hyderabad airport

Regards

राजन गुप्ता / Rajan Gupta
संयुक्त महाप्रबंधक (वित्त / टैरीफ) / Joint General Manager (Finance / Tariff)
भारतीय विमानपत्तन आर्थिक विनियामक प्राधिकरण / Airports Economic Regulatory Authority of India
तृतीय तल, उड़ान भवन / 3rd Floor, Udaan Bhawan,
सफदरजंग एयरपोर्ट/ Safdarjung Airport,
नई दिल्ली - 110003 | New Delhi - 110003,
फोन: 9818482330, 7042882480 / Ph.: 9818482330, 7042882480

========== Forwarded message ==========
From: Gopala Krishna Murty Nemani <GopalaKrishnaMurty.Nemani@gmrgroup.in>
To: "RAJAN GUPTA"<rajan.gupta1@aera.gov.in>
Cc: "Harsh Gulati"<Harsh.Gulati@gmrgroup.in>, "Director-ps"<director-ps@aera.gov.in>, "srconsultant-capex1@govcontractor.nic.in"<srconsultant-capex1@govcontractor.nic.in>
Date: Thu, 11 Jun 2026 16:14:57 +0530
Subject: RE: General capex at hyderababd airport
========== Forwarded message ==========

Dear Sir,

Please find the details of projects < 5 crore as required in the trail mail.

Regards

N. Gopala Krishna Murty
Mobile: +91 7893318484

From: rajan gupta <rajan.gupta1@aera.gov.in>
Sent: Thursday, June 11, 2026 6:39:03 AM
To: Harsh Gulati <Harsh.Gulati@gmrgroup.in>
Cc: Director-ps <director-ps@aera.gov.in>; Shyam Dhar Tiwari <srconsultant-capex1@govcontractor.nic.in>
Subject: General capex at hyderababd airport

Sir,

GHIAL has projected general capex of Rs.346 cr for less than 5 cr items.

However, no details have been provided for the same.

It is requested to provide details for same.

Regards

राजन गुप्ता / Rajan Gupta
संयुक्त महाप्रबंधक (वित्त / टैरीफ) / Joint General Manager (Finance / Tariff)
भारतीय विमानपत्तन आर्थिक विनियामक प्राधिकरण / Airports Economic Regulatory Authority of India
तृतीय तल, उड़ान भवन / 3rd Floor, Udaan Bhawan,
सफदरजंग एयरपोर्ट/ Safdarjung Airport,
नई दिल्ली - 110003 | New Delhi - 110003,
फोन: 9818482330, 7042882480 / Ph.: 9818482330, 7042882480

Summary of Details of Other Sustence Capex under General Capex		
Sr. No	**Details**	**Cost (In Rs. Crores)**
1	ARFF	8.00
2	IT	46.50
3	Landscape	27.77
4	P&E	133.38
5	Security	45.76
6	Strategic Initiatives	43.34
7	Terminal Ops	41.82
Total		**346.57**

ARFF							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
1	Construction of 3 additional vehicle bays at Main Fire Station (MFS)	2.80	-	-	-	-	2.80
2	Command Control Vehicle	1.60	-	-	-	-	1.60
3	Nomex suits (PPE)	0.40	-	0.48	-	-	0.88
4	Fire extinguishers & Nitrogen cylinders	0.12	0.12	0.12	0.12	-	0.48
5	BA Sets & Cylinders	0.20	-	0.23	-	-	0.43
6	Utility Vehicles	0.40	-	-	-	-	0.40
7	Aluminized Fire Proximity suit	-	0.16	-	-	0.21	0.37
8	HAZMAT(Hazardous Material) Incident handling Suits & Accessories	0.08	0.16	-	-	-	0.24
9	Personal lockers, storage racks, Office furniture	0.08	-	0.16	-	-	0.24
10	Firefighting accessories	-	0.08	-	0.12	-	0.20
11	Pneumatic Tents	-	-	0.19	-	-	0.19
12	Fire simulator	0.06	-	-	-	-	0.06
13	DCP Filling machine	0.05	-	-	-	-	0.05
14	Water Rescue Equipment	-	-	-	0.05	-	0.05
15	Audio system for fire incidence	0.01	-	-	-	-	0.01
Total							**7.995**

IT							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
1	AR/VR equipments for training	0.80	0.80	0.80	0.80	1.60	4.80
2	CCTV Video Analytics (Software)	0.80	0.80	0.80	0.80	1.60	4.80
3	Autonomous Wheelchair for PRM	-	1.60	1.60	0.80	-	4.00
4	Replacement of IP Telephony System	0.40	1.60	0.40	0.40	0.80	3.60
5	Access Control System Revamp - PTB to replace EOL equipment	3.19	-	-	-	-	3.19
6	ACDM Servers and Updates	0.20	0.32	0.20	0.20	2.00	2.92
7	Data Mart Servers	0.80	1.82	-	-	-	2.62
8	Airport Cab's availablity Display Screens	0.80	1.60	-	-	-	2.40
9	Fibre Connectivity with redundancy Offices	0.20	0.30	1.20	0.20	0.40	2.30
10	Construction Tech for site reivew and analytics	0.40	0.62	0.62	0.62	-	2.27
11	Help Desk Automation (Robotic Solution)	0.40	0.62	0.62	0.62	-	2.27
12	RPA (Robotic Processing Automation) solution for process improvemenet	0.40	0.62	0.62	0.62	-	2.27
13	Digital Twin/ AR-VR system	0.62	0.62	0.62	-	-	1.87
14	APOC Infrastructure	1.60	-	-	-	-	1.60
15	APOC Software Solution	0.80	-	-	-	0.42	1.22
16	Staff Access control System- Visitor Management	0.80	-	-	-	0.06	0.86
17	Video wall for live feed of Arrival Pax	0.28	0.28	0.28	-	-	0.84
18	RPA - Passenger reconsiliation and billing	0.40	0.33	-	-	-	0.73
19	Safety & Audit Management software	0.40	0.28	-	-	-	0.68
20	Office Modification & Upgrade	0.08	0.08	0.08	0.08	-	0.32
21	Virtual Queue managmenet system	0.08	0.20	-	-	-	0.28
22	Replacement of Laser Printers	0.08	0.08	0.02	-	-	0.18
23	Other Un-foreseen Projects (Contingency)	0.04	0.04	0.04	0.04	-	0.16
24	Miscellaneous	0.04	0.04	0.04	0.04	-	0.16
25	IT equipment for staff (CAPEX items)	0.08	0.04	0.03	-	-	0.15
Total							**46.50**

Landscape							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
1	Continuous Ambient Air Quality Monitoring Station (CAAQMS)	1.00	1.60	-	1.60	-	4.20
2	Landscape New rotary at Airport Entry Point	4.00	-	-	-	-	4.00
3	Landscape upgrade cost Main Access Road	3.28	-	-	-	-	3.28
4	Nursery relocation due to Northern Precient development	-	-	-	3.20	-	3.20
5	Nursery expansion	-	-	2.80	0.40	-	3.20
6	Landscape Features at rotatry	-	-	-	2.40	-	2.40
7	Landscape development around R2	0.80	0.80	-	-	-	1.60
8	Landscape Lighting	1.40	-	-	-	-	1.40
9	Landscape and Irrigation system for VVIP Road	0.15	-	-	0.80	-	0.95
10	Installation of Granite Planters in PTB	0.80	-	-	-	-	0.80
11	Development of COE (Building, Labs and Stores)	0.80	-	-	-	-	0.80
12	Fencing for Landscape area	0.80	-	-	-	-	0.80
13	Power connection to landscape sumps at EW road and NS road	0.24	0.20	-	-	-	0.44
14	Purchase of irrigation pumps & panels	0.17	0.08	-	0.16	-	0.41
15	CO and Ozone analysers at GMR Township	-	-	-	-	0.22	0.22
16	procurment of piezometers	0.05	-	-	-	-	0.05
17	Procurment of Noise Monitoring Terminal (NMT-1) at Sardar Nagar & NMT-2 at Pochet	0.02	-	-	-	-	0.02
Total							**27.77**

P&E							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
1	BASHM/wildlife equipment	0.80	0.90	0.98	1.06	1.15	4.90
2	Reconfiguration of RESA for Main Runway	-	4.60	-	-	-	4.60
3	Detailed Airfield Pavement Analysis & Structural assessment	4.00	-	-	-	-	4.00
4	Airport Boundary Wall Extension near Gate House 2	4.00	-	-	-	-	4.00
5	Refurbishment of landside compound wall	-	4.00	-	-	-	4.00
6	Airside service roads recarpeting	3.96	-	-	-	-	3.96
7	Automation of A-SMGCS A-SMGCS (AGL) Level-04 Integration	3.20	-	-	-	-	3.20
8	Development of GSE Parking Area	3.20	2.40	-	-	-	5.60
9	Tightness Monitoring System in hydrent lines	3.20	-	-	-	-	3.20
10	Construction of Airline Engineering Maintenance Building AEMB 3	3.20	-	-	-	-	3.20
11	Public Trasport Center (PTC) Developments / Enhancement	0.80	0.80	1.60	-	-	3.20
12	Replacement of old check in hall column & wall cladding	-	-	-	3.20	-	3.20
13	Improvement of Drainage system at RGIA	-	3.20	-	-	-	3.20
14	Development works at water reservoir 7	-	2.96	-	-	-	2.96
15	Expansion works in Fuel Farm	2.80	-	-	-	-	2.80
16	GRF Automation sensors facility for Current Main Rwy and Future Northern Rwy by FY 28	-	2.49	-	-	-	2.49
17	Truck Parking and Facility at Cargo terminal 2	2.40	-	-	-	-	2.40
18	Road safety & Traffic management works in MAR, E-W, N-S & Internal roads	-	-	-	2.40	-	2.40
19	Replacement & New Leader Vehicles	-	-	0.80	1.56	-	2.36
20	Land filling for additional business requirements - 2 Acres New Second Line Warehousing (current + future), 1 Acre- Packhouse, 2 Acre land filling	-	2.34	-	-	-	2.34
21	Development of Office Space in PTB Post Expansion	1.20	-	1.00	-	-	2.20
22	Upgradation of Phase -1 & Phase 2 - 10MWp Solar power plant Inverters & centralized SCADA	-	-	-	2.16	-	2.16
23	Pack House for perisheble goods	2.00	-	-	-	-	2.00

P&E							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
24	Fire Engines upgradation	2.00	-	-	-	-	2.00
25	Runway closure inserts light marker-Remote controlled at ATC (Saint Andrews cross)	2.00	-	-	-	-	2.00
26	Unitised package substation at NS road	2.00	-	-	-	-	2.00
27	Replacement of Lights at terminal	-	-	-	2.00	-	2.00
28	Works for Traffic Safety requirements	0.96	0.96	-	-	-	1.92
29	Expansion areas - Lifelines, Flat and Step Walkways majorly along the northern skylights	1.60	-	-	-	-	1.60
30	PA system at Main Access Roads	1.60	-	-	-	-	1.60
31	Under Ground cable fault Van	-	-	-	1.60	-	1.60
32	Battery replacement	-	-	-	1.60	-	1.60
33	Temporary Warehouse	-	1.60	-	-	-	1.60
34	Alternate Power Connection for fuel farm	1.44	-	-	-	-	1.44
35	Catwalk Installation Phase-II	1.39	-	-	-	-	1.39
36	Replacement of AC's	-	-	-	1.28	-	1.28
37	Replacement of fabric at Carpark level including LED lights	1.21	-	-	-	-	1.21
38	Airside office expanison towards IMC wing	1.20	-	-	-	-	1.20
39	FEGPU facility at stand 54 due to design constraints	1.20	-	-	-	-	1.20
40	HT & LT Cable fault locator	1.20	-	-	-	-	1.20
41	Automated flow management & control system for baggage tugs/trolley in BMA/BBA	1.20	-	-	-	-	1.20
42	Recarpeting of Old road from bus parking at SOB to GA lounge & infront of Aero towers (1KM) & foot path	1.20	-	-	-	-	1.20
43	VIP Car Parking & connecting ramp	1.18	-	-	-	-	1.18
44	KAMUNI CHERU External power supply	1.04	-	-	-	-	1.04
45	Replacement of water pipe lines	-	-	-	0.96	-	0.96
46	Integrated Weighing Scale	0.94	-	-	-	-	0.94
47	Roof 1, Roof 2, Roof 3 & Roof 4- Flat and Step Walkways	0.91	-	-	-	-	0.91
48	Runway Rehabilitation + CAT1 to CAT 2	-	-	-	-	0.83	0.83

P&E							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
49	Development, Testing & Commissioning a Real-time Maintenance Management solution	0.80	-	-	-	-	0.80
50	Internal software solution for Auttomated database of NOTAM & NOC related data.	0.80	-	-	-	-	0.80
51	Landside Utilities mapping	0.80	-	-	-	-	0.80
52	PTC Washroom upgradation	0.80	-	-	-	-	0.80
53	GA Terminal (Office Space and Furniture)	0.80	-	-	-	-	0.80
54	Covered car park provision for AAI vehicles near ATC complex	0.80	-	-	-	-	0.80
55	Replacement of 100KVA UPS, 80KVA and 30KVA UPS	-	0.80	-	-	-	0.80
56	Upgradation of Fire Alarm System (FAS) System	-	-	-	0.80	-	0.80
57	Upgradation of existing Terminal smoke vent Control System	-	-	-	0.80	-	0.80
58	Replacement of fire hydrant	-	-	-	0.80	-	0.80
59	Supply & Installation of Aluminium Gutter for Roof 3	-	-	-	0.80	-	0.80
60	Replacement of all High mast light fixtures in Apron Area	-	-	-	0.72	-	0.72
61	Refurbishment of Oil Water Separator	0.60	-	-	-	-	0.60
62	VHF sets along with WPC license	0.60	-	-	-	-	0.60
63	IT infrastructure at PTC	0.60	-	-	-	-	0.60
64	Oil Water Seperator	-	-	-	0.58	-	0.58
65	cement grouting works at Ramp back side (West side)	0.40	0.16	-	-	-	0.56
66	Roof 3 & Roof 4 - Aluminium Gutter	0.52	-	-	-	-	0.52
67	Refurbishment/ Repair of existing Reclaim belts - Dog-house & binacles	-	-	-	-	0.48	0.48
68	Establishment of CoE for AGL.	0.48	-	-	-	-	0.48
69	Above Ground Tank Gauging (ATG) System upgradation	0.48	-	-	-	-	0.48
70	Office rennovation	0.46	-	-	-	-	0.46
71	Granite flooring at arrival ramp exit walkway	-	-	-	0.42	-	0.42
72	Drinking water sysem upgradation/replacement	-	-	-	0.40	-	0.40
73	SITC of Online Temp & RH monitoring across PTB and other areas PH 1	0.40	-	-	-	-	0.40

P&E							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
74	Improvement of AGL circuits - Replacement of primary connectors	0.40	-	-	-	-	0.40
75	OBSTACLE ASSESMENT software SKY SAFE	0.40	-	-	-	-	0.40
76	Equipment Staging Area	0.40	-	-	-	-	0.40
77	Granite flooring at Arrival ramp entry approach walkway	-	-	-	0.35	-	0.35
78	Online Monitoring System in real time for STP-4	0.32	-	-	-	-	0.32
79	SITC-GI pipe(3" & 2") line for West expansion area	0.32	-	-	-	-	0.32
80	Controllers and Capacitor replacement in APFC panels in ALS	0.32	-	-	-	-	0.32
81	SITC-GI pipe(3" & 2") line for East expansion area	0.28	-	-	-	-	0.28
82	Office refurbishment for project team	0.28	-	-	-	-	0.28
83	Fire water hydrant system - Main Control Valve	0.28	-	-	-	-	0.28
84	Stone pitching on both sides of paver roads from compressor station to water tanks area.	0.28	-	-	-	-	0.28
85	Procurement of high mast lights	0.26	-	-	-	-	0.26
86	MS structure on existing ramps	0.24	-	-	-	-	0.24
87	PESC related	0.04	0.04	0.04	0.04	0.04	0.20
88	Fencing Extension	0.20	-	-	-	-	0.20
89	Construction of stores at Landside	0.20	-	-	-	-	0.20
90	Rotork Pakscan upgradation	0.18	-	-	-	-	0.18
91	Smart lighting for new PBB	0.16	-	-	-	-	0.16
92	Upgradation of 60KVA UPS in ATC	0.16	-	-	-	-	0.16
93	IMD - MET park Upgradation south of Primary Rwy	0.16	-	-	-	-	0.16
94	Provision of redundancy UPS for APOC	0.15	-	-	-	-	0.15
95	Data Centre Tri-Level Redundancy Work	0.14	-	-	-	-	0.14
96	Forklift for central stores	-	0.12	-	-	-	0.12
97	Construction of washroom at AGL East S/S & DG Yard	0.12	-	-	-	-	0.12
98	3D Modelling Design Software/ Project Management softwares, Structural design softwares	0.12	-	-	-	-	0.12
99	Follow Me Boards	0.12	-	-	-	-	0.12
100	Solar based insect trap	0.12	-	-	-	-	0.12

P&E							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
101	Aljac sampler provision for Above ground Tank sampling	0.12	-	-	-	-	0.12
102	Office furniture upgradation	0.12	-	-	-	-	0.12
103	Pick up & Office vehicle - Electric Vehicle	-	-	-	-	0.12	0.12
104	Providing additional power source to APOC	0.12	-	-	-	-	0.12
105	Storage Container - 40 feet	0.11	-	-	-	-	0.11
106	Search Lights for Leader vehicles	-	0.10	-	-	-	0.10
107	Procurement of area scan camera	0.10	-	-	-	-	0.10
108	Central Stores Renovation works (Roof ceiling works, False ceiling works, Kitchen provision works)	0.10	-	-	-	-	0.10
109	CCTV for Scrap yard	0.10	-	-	-	-	0.10
110	TMRS	0.05	0.03	-	-	-	0.08
111	Water Barriers	-	0.06	-	-	-	0.06
112	Harmony M3 Device for Leader vehicles	-	0.06	-	-	-	0.06
113	SITC of Flow meter for Decoupler line for expansion chiller plant along with the integration through CPM system.	0.06	-	-	-	-	0.06
114	Display Board for Weigh Bridge setup (Cameras -02no's,Network switch,Software,LED Signal lamp - 02,Cat 6 cable etc)	0.06	-	-	-	-	0.06
115	FLB ramp house access ladders	0.05	-	-	-	-	0.05
116	Chemical storage provision at CS	0.05	-	-	-	-	0.05
117	Bucket Truck for Central Stores	0.05	-	-	-	-	0.05
118	LED Screen for Airside training room	0.02	-	-	-	-	0.02
119	Steel Almirah with Glass door -storewell for Central Stores	0.02	-	-	-	-	0.02
120	Storage Racks for L&F	0.02	-	-	-	-	0.02
121	SITC of Lubricant Store at Engineering Maintenance Building	-	-	-	-	0.01	0.01
122	RC benchs for Scrap yard	0.01	-	-	-	-	0.01
Total							**133.38**

Security							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
1	Replacement of 04 Nos rapiscan level 1 machine with CTX & installation	4.80	-	-	-	-	4.80
2	Construction of Unit kote (Armoury)	4.65	-	-	-	-	4.65
3	Procurement of BDDS equipments	8.00	-	-	-	-	8.00
4	PESC Area, ATRS add one machine for D-to-D transfer	0.80	0.80	0.80	0.80	-	3.20
5	Security Operations Control Center (SOCC) Furniture for CISF	1.60	1.60	-	-	-	3.20
6	05 no. of Dual view hand baggage X-BIS machines	2.73	-	-	-	-	2.73
7	Handheld Metal Detectors	0.40	0.40	0.40	0.40	0.40	2.00
8	Procurement of Remotely operator Vehicle (ROV) BDDS equipment	2.00	-	-	-	-	2.00
9	Decentralised access control system	1.60	-	-	-	-	1.60
10	Procurement of trays (Smiths & Ledios) for ATRs	0.40	0.40	0.40	0.40	-	1.60
11	DFMDs	1.20	-	-	-	-	1.20
12	Additional infrastructure for CISF to cater for additional strength (pre induction formalities of CISF)	1.20	-	-	-	-	1.20
13	EVD (explosive vapour detector)	0.96	-	-	-	-	0.96
14	Perimeter wall for ATC complex	0.68	-	-	-	-	0.68
15	Inline Baggage Handeling System E- Documentation	0.61	-	-	-	-	0.61
16	Chairs for all duty posts	0.12	0.12	0.12	0.12	0.12	0.60
17	Foldable Secontry Ladder Point Check (SLPC) frisking booths for boarding gate	0.60	-	-	-	-	0.60
18	Construction of Badminton court CISF	0.56	-	-	-	-	0.56

Security							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
19	Replacement of BDDS equipments	0.48	-	-	-	-	0.48
20	Briefing and Debriefing shed at CISF Complex	0.44	-	-	-	-	0.44
21	SS (Stainless steel) doors and walls for HBS office	0.42	-	-	-	-	0.42
22	Crash Rated Electro-Hydraulic Tyre Killer	0.40	-	-	-	-	0.40
23	PCC (Plain Cement Concrete) between various blocks	0.40	-	-	-	-	0.40
24	Drain line replacement at CISF complex and ANNEX	0.40	-	-	-	-	0.40
25	Refurbishment and Expansion of AEP Office	0.38	-	-	-	-	0.38
26	Procurement of Recoilless disruptor, BDDS equipment	0.31	-	-	-	-	0.31
27	Cabins for security staff	0.30	-	-	-	-	0.30
28	Recarpetng and sprucing of RD,BCAS office	0.24	-	-	-	-	0.24
29	Kitchen equipments	0.21	-	-	-	-	0.21
30	Shifting of ACCR	0.08	-	-	-	0.12	0.20
31	STP Refurbishment at CISF	0.20	-	-	-	-	0.20
32	Installation of CACS (Centralized Access Control System)	0.20	-	-	-	-	0.20
33	Washing Machines for Bachelors Requirements for CISF	0.16	-	-	-	-	0.16
34	Lighting Fixtures at CISF	0.16	-	-	-	-	0.16
35	Locker for key management for security	0.14	-	-	-	-	0.14
36	Vision Controller Servers -1	0.12	-	-	-	-	0.12
37	Gym Equipment/ recreational hall for CISF	0.12	-	-	-	-	0.12
38	Solar Heaters for CISF	0.10	-	-	-	-	0.10
39	IT Requirement for HBS	0.07	-	-	-	-	0.07
40	Staff lockers for Airline Security functions & Almirah MS make	0.05	-	-	-	-	0.05

Security							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
41	Camera	0.03	-	-	-	-	0.03
42	Hand held machines-6	0.03	-	-	-	-	0.03
43	Air conditioners for dog kennel	0.02	-	-	-	-	0.02
44	Barcode Scanners for Level 4 and OOGs(out of Guage)	0.01	-	-	-	-	0.01
Total							**45.76**

Strategic Initiatives							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
1	Carpark parking zones modification and upgradation	2.00	2.00	-	-	-	4.00
2	New Office Space in terminal and aero towers and PSOB	3.44	-	-	-	-	3.44
3	New Office Building Requirement	3.20	-	-	-	-	3.20
4	Procurement of vehicles for operations	2.64	-	-	-	-	2.64
5	New Car park system	2.64	-	-	-	-	2.64
6	Cafeteria Expansion	2.40	-	-	-	-	2.40
7	Open Play Area at East side to Aero towers 1	2.28	-	-	-	-	2.28
8	Free Shuttle bus battery replacement Need to check with Industry expert	1.76	-	-	-	-	1.76
9	Carpark Civil, MEP modification developemnt works.	1.75	-	-	-	-	1.75
10	Providing of Office and stores space for GTD operations and services providers as per new carpark master plan	-	1.60	-	-	-	1.60
11	Upgradation of washroom at office	1.60	-	-	-	-	1.60
12	Township villa renovation works	1.60	-	-	-	-	1.60
13	Renovation Guest House	1.20	-	-	-	-	1.20
14	Procurement of vehicles for operations	-	-	1.05	-	-	1.05
15	Procurement of Tractor along with Trolley, Crysta & Tanker	0.94	-	-	-	-	0.94
16	Signages	-	-	-	0.80	-	0.80
17	Holographic virtual passenger assistance	0.40	0.40	-	-	-	0.80
18	Fixtures and furnitures for office	0.80	-	-	-	-	0.80
19	Old Cafeteria Renovations	0.80	-	-	-	-	0.80
20	Procurement of Toyota Hycross, EV-nos & Eicher / Mahindra make Crane	-	0.72	-	-	-	0.72
21	Vehicle for VIP movements	0.68	-	-	-	-	0.68
22	Renovation of Suswad Dining area & Swad Kitchen	0.56	-	-	-	-	0.56

Strategic Initiatives							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
23	AGV (Automatic Guided vehicle)	0.24	0.24	-	-	-	0.48
24	Renovation & upgradation of Auditorium, PSOB	0.48	-	-	-	-	0.48
25	Boom Barriers for carpark zones and service road to control vehicle movement	0.45	-	-	-	-	0.45
26	Carpark Facilitiy wash rooms upgradation	0.40	-	-	-	-	0.40
27	LED Screens/Video Walls	0.40	-	-	-	-	0.40
28	GYM Equipment & Indoor Sports for Township and Accommodation center	0.38	-	-	-	-	0.38
29	PSOB - 2 Weeler parking	0.36	-	-	-	-	0.36
30	PYLON for airport	-	0.16	-	0.16	-	0.32
31	Procurement of EV-3 nos & Scorpio - 1no	-	-	-	0.28	-	0.28
32	water spinkler	0.28	-	-	-	-	0.28
33	Aero tower Lobby Upgradation	0.25	-	-	-	-	0.25
34	Safety Training Room Automation – Landside	0.24	-	-	-	-	0.24
35	Safety Training Room Automation – Airside	0.24	-	-	-	-	0.24
36	GTD Office & Service proviers operations office and storage space	0.20	-	-	-	-	0.20
37	New recreation area at Terminal	0.20	-	-	-	-	0.20
38	Safety Vehicle	0.20	-	-	-	-	0.20
39	Electrical Bus charging points shed & utilities	0.19	-	-	-	0.00	0.20
40	Kerb stone construction at carpark	0.16	-	-	-	-	0.16
41	Drinking water RO plants at Car Park	0.16	-	-	-	-	0.16
42	Cisco LG display in meeting rooms	0.12	-	-	-	-	0.12
43	ATV (All Terrain Vehicle) with trailer	0.10	-	-	-	-	0.10
44	Garbage bins for carpark & Level C	-	-	-	-	0.05	0.05
45	Self balancing hoverboard	0.04	-	-	-	-	0.04
46	GTEM Office IT requirements	0.03	-	-	-	-	0.03
47	5 TABS	-	-	-	-	0.03	0.03

Strategic Initiatives							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
48	Safety & Envronmental regulatory Documents - ICAO/ACI materials	-	0.02	-	-	-	0.02
49	Procurment of Printer	0.01	-	-	-	-	0.01
50	Procurement of Charging guns for EVs (ETigor & EV Nexon)	0.01	-	-	-	-	0.01
Total							**43.34**

Terminal Ops							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
1	Renovation of old washrooms similar to new washrooms	4.91	-	-	-	-	4.91
2	Signage	3.42	0.25	0.26	0.27	0.00	4.21
3	Pax experince development initiatives	0.80	0.80	0.80	0.80	0.80	4.00
4	Pax Seating - 1350	0.96	0.68	1.00	1.05	0.00	3.70
5	Revamping and Refurbishment of Level H office spaces.	2.40	-	-	-	-	2.40
6	Crew processing area	2.34	-	-	-	-	2.34
7	Statutory equipment	-	-	1.60	-	-	1.60
8	Simulation tool	0.80	0.80	-	-	-	1.60
9	Furniture & Chairs for stakeholders	0.24	-	0.63	0.66	0.00	1.52
10	Gate portal	1.36	-	-	-	-	1.36
11	ADB 6 counter at Row J and Doghouse	1.32	-	-	-	-	1.32
12	Refurbishment of lounges	-	1.20	-	-	-	1.20
13	Vitra chairs	1.13	-	-	-	-	1.13
14	Virtual Information Kiosks	1.04	-	-	-	-	1.04
15	Customs Requirement	0.24	0.25	0.26	0.27	0.00	1.03
16	Water Body at Level D & C	0.80	-	-	-	-	0.80
17	Refurbishments & 2 additional PRM lounges	0.32	-	-	-	0.32	0.64
18	Procurement of SS chairs -70x3 units - Bench Model	0.17	-	0.29	-	0.17	0.62
19	Automatic External Defibrilator (AED)	0.16	-	0.12	0.24	-	0.52
20	E visa kiosk for BOI	0.52	-	-	-	-	0.52
21	Q-Managers	0.43	-	0.50	0.51	-	1.45
22	A-CDM (Airport Collaborative Decision-Making) Screens -Installation and Material supply	0.40	-	-	-	-	0.40
23	SS Railing Works & Bollards	0.16	-	0.17	-	0.00	0.33
24	Information desks -1	0.32	-	-	-	-	0.32
25	Baby Strollers / Prams	0.10	-	0.10	0.11	-0.00	0.30
26	Trolley Scooters - 6	0.14	-	0.15	-	0.00	0.29
27	LED/Digital signage stands/clocks - 70	-	0.12	0.13	-	-	0.25

Terminal Ops							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
28	Vehicle for CFL	0.18	-	-	-	-	0.18
29	PRM Zones _ lounge /PRM phones forecourt	0.16	-	-	-	-	0.16
30	E scooter	0.03	-	-	0.12	-	0.15
31	AED & First Aid	-	-	-	0.12	-	0.12
32	Tissue dispensers	-	-	0.05	0.06	-	0.12
33	Sanitary vending machine	0.03	0.03	0.03	0.03	-	0.11
34	4-Load cell Weighing scales - 25	-	0.03	-	0.03	0.04	0.10
35	Buffet counter setup for reserve lounges	0.10	-	-	-	-	0.10
36	OOG Trolleys -50	0.05	-	0.05	-	0.00	0.10
37	Garbage transportaion dustbins-Big	0.04	-	0.05	-	-	0.09
38	Water fountain Mats	0.02	0.02	0.02	0.02	-	0.08
39	Drinking water fountains	-	0.04	-	0.04	-	0.08
40	Water dispensers	0.02	0.02	0.03	-	-	0.07
41	Duty Mobile Handset/RT Sets	0.02	-	0.02	0.02	-	0.06
42	SS Dust Bin-Medium	-	0.03	-	-	0.03	0.06
43	HHMD for Customs - 50	-	0.01	-	0.05	-	0.06
44	Passenger feedbacks units for old terminal washrooms.	0.01	0.01	0.01	0.02	-	0.06
45	Tablets for Audits and Inspections	0.05	-	-	-	-	0.05
46	Wall mounted Q Managers	-	0.04	-	-	-	0.04
47	TOPS Staff - Microoven(2) , Fridge(2)& Color Printer(1) & Mirror(1)	0.04	-	-	-	-	0.04
48	Hand Pallets	-	0.01	0.02	-	-	0.03
49	Perforated Dust Bin-Medium	-	0.03	-	-	-	0.03
50	Electric hot case- 6 no	0.03	-	-	-	-	0.03
51	Storage racks	-	0.02	-	-	-	0.02
52	Mobile instrument	0.01	-	-	-	0.01	0.02
53	Water transportaion trolley	0.01	-	0.01	-	-	0.02
54	Procurement of wall mounted chairs for housekeeping janitors	0.01	-	0.01	-	-	0.02
55	washing machine for washing of curtains in Terminal	0.01	-	-	-	-	0.01
56	Chemical dilutor	-	-	-	0.01	-	0.01

Terminal Ops							Rs Crores
S No	Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
57	New Duty mobile and APOC shift lead	0.01	-	-	-	-	0.01
Total							**41.82**