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## Annexure 1: Training cost calculations

Table Annex 1: Compilation of different government training rates (considering training in the RCUES Lucknow campus)

Components	MoHUA's CCBP JnNURM rates	MoHUA's Jal Jeevan Mission Rates		ISTM GO 2020 order rates
	All officials (per participant per day)	Class I officers (L1) per participant per day	Class II officers (L2) per participant per day	All officials (per participant per day)
Reading material and training kit per training	4400	10000	8100	5200
Training hall charges per day				
Site visit/local transport per training				
Institutional charges per day				
Administrative charges per training				
Copier, documentation etc. per training				
Lodging and boarding per training				
Honorarium per session for guest faculty per day	3000			
TA for guest faculty per training per training	15000			
Train travel for participants per trip (for officials from outside Lucknow)	4000			
Local travel for participants (for officials from Lucknow)	500			

Table Annex 2: Assumptions used for training cost calculations

Parameters	Value	Source
Number of cities	17	All municipal corporations of Uttar Pradesh
Number of officials to be trained annually	500	Survey insights
Training instances per year for an individual	4	Survey insights
Number of days per training	2	Survey insights
Total number of participants per batch in one training	30	Industry practice
Training events per year	17	

Table Annex 3: Assumptions used for manpower cost calculations

Parameters	Value	Source
2 permanent faculties with subject matter expertise	INR 30 lakh per year	Industry costs
2-3 staff for the capacity building cell	INR 30 lakh per year	
Annual increment in costs	10%	

## Annexure 2: TNA result factsheets for all government agencies

### Annexe 3.1. Municipal Corporations and Smart Cities of Group II – Knowledge-based training needs

Themes →		Street infrastructure planning and design	Parking planning and management	Urban and transport planning	Electric mobility planning
Sub-themes highlighted by managerial posts →	Very high priority	<ul style="list-style-type: none"> <li>Complete street design</li> <li>Road network planning</li> <li>Non-motorised transport (NMT) infrastructure planning and design</li> <li>Safe intersection design</li> </ul>	<ul style="list-style-type: none"> <li>Developing parking policy</li> <li>Parking standards and guidelines</li> </ul>	<ul style="list-style-type: none"> <li>Growth forecasting and scenarios</li> </ul>	--
	High priority	<ul style="list-style-type: none"> <li>Universal accessibility principles</li> <li>Tactical urbanism</li> </ul>	<ul style="list-style-type: none"> <li>Developing area-based parking strategies</li> <li>PPP in parking management</li> </ul>	--	--
	Low priority	<ul style="list-style-type: none"> <li>Bus stop infrastructure planning and design</li> </ul>	--	<ul style="list-style-type: none"> <li>Compact city planning</li> <li>Multi-modal integration</li> <li>Planning/Integrating public transport with paratransit</li> <li>Last mile connectivity</li> <li>Gender-sensitive planning approaches</li> </ul>	<ul style="list-style-type: none"> <li>Introduction to electric mobility</li> <li>Route selection, Operations Planning and Scheduling of E-bus fleet</li> <li>Integrating electric mobility in regional (mofussil) connectivity</li> </ul>
Sub-themes highlighted by technical posts →	Very high priority	<ul style="list-style-type: none"> <li>Complete street design</li> <li>Road network planning</li> <li>Bus stop infrastructure planning and design</li> <li>Safe intersection design</li> <li>Universal accessibility principles</li> <li>Tactical urbanism</li> </ul>	<ul style="list-style-type: none"> <li>Developing parking policy</li> <li>Developing area based parking strategies</li> <li>Parking standards and guidelines</li> </ul>	<ul style="list-style-type: none"> <li>Transit-oriented development (TOD)</li> <li>Compact city planning</li> </ul>	<ul style="list-style-type: none"> <li>Introduction to electric mobility</li> <li>Route selection, Operations Planning and Scheduling of E-bus fleet</li> </ul>

	High priority	<ul style="list-style-type: none"> <li>• Non-motorised transport (NMT) infrastructure planning and design</li> </ul>	<ul style="list-style-type: none"> <li>• PPP in parking management</li> </ul>	<ul style="list-style-type: none"> <li>• Land use and transport integration</li> <li>• Low Emission Zone planning</li> <li>• Multi modal integration</li> <li>• Last mile connectivity</li> </ul>	<ul style="list-style-type: none"> <li>• Charging Infrastructure network planning</li> </ul>
	Low priority	--	--	<ul style="list-style-type: none"> <li>• Growth forecasting and scenarios</li> <li>• Planning/Integrating public transport with paratransit</li> </ul>	--

Source: Authors' analysis

### Annexe 3.2. Municipal Corporations and Smart Cities of Group II – Skill-based training needs

Themes →		Project planning and communication skills	Functional skills	Interpersonal skills
Sub-themes highlighted by managerial posts →	Very high priority	<ul style="list-style-type: none"> <li>• Project Management</li> <li>• Preparation of Project proposals, RFP, and contracts</li> </ul>	<ul style="list-style-type: none"> <li>• Traffic and urban transport surveys - conducting and managing</li> <li>• Data collection and analysis</li> </ul>	--
	High priority	--	--	<ul style="list-style-type: none"> <li>• Leadership and team building</li> <li>• Human resource management</li> </ul>
	Low priority	--	<ul style="list-style-type: none"> <li>• Transport modelling</li> <li>• Office Package (Word, Excel, Powerpoint)</li> <li>• Designing skills (AUTOCAD, Photoshop etc.)</li> </ul>	--
Sub-themes highlighted by technical posts →	Very high priority	<ul style="list-style-type: none"> <li>• Modern finance mechanisms (PPP, municipal bonds, etc.)</li> </ul>	--	<ul style="list-style-type: none"> <li>• Leadership and team building</li> </ul>
	High priority	--	--	--
	Low priority	<ul style="list-style-type: none"> <li>• Project Management</li> <li>• Preparation of Project proposals, RFP, Contracts</li> </ul>	<ul style="list-style-type: none"> <li>• Transport modelling</li> <li>• Data collection and analysis techniques</li> <li>• Mapping skills (GIS)</li> </ul>	--

### Annexe 3.3. Development Authority of Group I – Knowledge-based training needs

Themes →		Street infrastructure planning and design	Parking planning and management	Urban and transport planning	Electric mobility planning
Sub-themes highlighted by managerial posts →	Very high priority	<ul style="list-style-type: none"> <li>Complete street design</li> <li>Road network planning</li> <li>Safe Intersection Design</li> </ul>	--	<ul style="list-style-type: none"> <li>Transit oriented development (TOD)</li> </ul>	--
	High priority	<ul style="list-style-type: none"> <li>Universal Accessibility Principles</li> </ul>	<ul style="list-style-type: none"> <li>Developing parking policy</li> <li>Developing area based parking strategies</li> <li>Parking standards and guidelines</li> <li>PPP in parking management</li> </ul>	<ul style="list-style-type: none"> <li>Growth forecasting and scenarios</li> <li>Last mile connectivity</li> </ul>	--
	Low priority	<ul style="list-style-type: none"> <li>Bus stop infrastructure planning and design</li> <li>Non-motorised transport (NMT) infrastructure planning and design</li> </ul>	--	<ul style="list-style-type: none"> <li>Land use and transport integration</li> <li>Planning for Urban Freight Movement</li> <li>Planning/Integrating public transport with paratransit</li> <li>Gender sensitive planning approaches</li> </ul>	<ul style="list-style-type: none"> <li>Introduction to electric mobility</li> <li>Integrating electric mobility in regional (mofussil) connectivity</li> <li>Charging Infrastructure network planning</li> </ul>
Sub themes highlighted by technical posts →	Very high priority	<ul style="list-style-type: none"> <li>Road network planning</li> <li>Safe Intersection Design</li> </ul>	<ul style="list-style-type: none"> <li>Developing parking policy</li> <li>Developing area based parking strategies</li> <li>Parking standards and guidelines</li> </ul>	<ul style="list-style-type: none"> <li>Transit oriented development (TOD)</li> <li>Compact city planning</li> </ul>	--
	High priority	<ul style="list-style-type: none"> <li>Complete street design</li> </ul>	--	<ul style="list-style-type: none"> <li>Low Emission Zone planning</li> <li>Planning for Urban Freight Movement</li> <li>Last mile connectivity</li> </ul>	--
	Low priority	Tactical Urbanism	PPP in parking management	<ul style="list-style-type: none"> <li>Growth forecasting and scenarios</li> </ul>	

				<ul style="list-style-type: none"> <li>• Multi modal integration</li> <li>• Planning/Integrating public transport with paratransit</li> <li>• Gender sensitive planning approaches</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to electric mobility</li> <li>• Charging Infrastructure network planning</li> </ul>
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### Annexe 3.4. Development Authority of Group I – Skill-based training needs

Themes →		Project planning and communication skills	Functional skills	Interpersonal skills
Sub-themes highlighted by managerial posts →	Very high priority	<ul style="list-style-type: none"> <li>• Project Management</li> <li>• Preparation of Project proposals, RFP, Contracts</li> </ul>	--	--
	High priority	--	<ul style="list-style-type: none"> <li>• Transport modelling</li> <li>• Mapping skills (GIS)</li> </ul>	<ul style="list-style-type: none"> <li>• Leadership and Team building</li> </ul>
	Low priority	<ul style="list-style-type: none"> <li>• Information, Education and Communication (IEC)</li> </ul>	<ul style="list-style-type: none"> <li>• Designing skills (AUTOCAD, Photoshop etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Human resource management</li> </ul>
Sub-themes highlighted by technical posts →	Very high priority	--	<ul style="list-style-type: none"> <li>• Mapping skills (GIS)</li> </ul>	--
	High priority	<ul style="list-style-type: none"> <li>• Information, Education and Communication (IEC)</li> </ul>	<ul style="list-style-type: none"> <li>• Office Package (Word, Excel, Powerpoint)</li> <li>• Designing skills (AUTOCAD, Photoshop etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Human resource management</li> </ul>
	Low priority	<ul style="list-style-type: none"> <li>• Project Management</li> <li>• Preparation of Project proposals, RFP, contracts</li> <li>• Media and social media engagement</li> <li>• Modern finance mechanisms (PPP, municipal bonds, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Data collection and analysis techniques</li> </ul>	<ul style="list-style-type: none"> <li>• Leadership and Team building</li> </ul>

### Annexe 3.5. Development Authority of Group II – Knowledge-based training needs

Themes →		Street infrastructure planning and design	Parking planning and management	Urban and transport planning	Electric mobility planning
Sub-themes highlighted by managerial posts →	Very high priority	--	<ul style="list-style-type: none"> <li>• PPP in parking management</li> </ul>	<ul style="list-style-type: none"> <li>• Land use and transport integration</li> <li>• Compact city planning</li> <li>• Multi modal integration</li> <li>• Last mile connectivity</li> </ul>	--
	High priority	<ul style="list-style-type: none"> <li>• Complete street design</li> <li>• Road network planning</li> <li>• Universal Accessibility Principles</li> </ul>	<ul style="list-style-type: none"> <li>• Developing parking policy</li> <li>• Developing area-based parking strategies</li> </ul>	<ul style="list-style-type: none"> <li>• Low Emission Zone planning</li> <li>• Planning/Integrating public transport with paratransit</li> <li>• Gender sensitive planning approaches</li> </ul>	--
	Low priority	<ul style="list-style-type: none"> <li>• Safe Intersection Design</li> </ul>	<ul style="list-style-type: none"> <li>• Parking standards and guidelines</li> </ul>	<ul style="list-style-type: none"> <li>• Transit oriented development (TOD)</li> <li>• Growth forecasting and scenarios</li> <li>• Planning for Urban Freight Movement</li> </ul>	<ul style="list-style-type: none"> <li>• Route selection, Operations Planning and Scheduling of E-bus fleet</li> <li>• Charging Infrastructure network planning</li> <li>• Electric mobility policy and regulations landscape</li> </ul>
Sub themes highlighted by technical posts →	Very high priority	<ul style="list-style-type: none"> <li>• Complete street design</li> <li>• Road network planning</li> </ul>	<ul style="list-style-type: none"> <li>• Developing parking policy</li> <li>• Developing area based parking strategies</li> <li>• Parking standards and guidelines</li> </ul>	<ul style="list-style-type: none"> <li>• Transit oriented development (TOD)</li> <li>• Compact city planning</li> <li>• Growth forecasting and scenarios</li> <li>• Last mile connectivity</li> </ul>	--
	High priority	<ul style="list-style-type: none"> <li>• Safe Intersection Design</li> <li>• Tactical Urbanism</li> </ul>	<ul style="list-style-type: none"> <li>• PPP in parking management</li> </ul>	<ul style="list-style-type: none"> <li>• Land use and transport integration</li> </ul>	--

				<ul style="list-style-type: none"> <li>• Low Emission Zone planning</li> <li>• Planning for Urban Freight Movement</li> </ul>	
	Low priority	<ul style="list-style-type: none"> <li>• Non-motorised transport (NMT) infrastructure planning and design</li> <li>• Universal Accessibility Principles</li> </ul>	--	<ul style="list-style-type: none"> <li>• Multi modal integration</li> </ul>	<ul style="list-style-type: none"> <li>• Charging Infrastructure network planning</li> <li>• Electric mobility policy and regulations landscape</li> </ul>

### Annexe 3.6. Development Authority of Group II – Skill-based training needs

Themes →		Project planning and communication skills	Functional skills	Interpersonal skills
Sub-themes highlighted by managerial posts →	Very high priority	--	<ul style="list-style-type: none"> <li>• Mapping skills (GIS)</li> </ul>	--
	High priority	<ul style="list-style-type: none"> <li>• Project Management</li> <li>• Preparation of Project proposals, RFP, contracts</li> <li>• Modern finance mechanisms (PPP, municipal bonds, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Office Package (Word, Excel, Powerpoint)</li> </ul>	--
	Low priority	<ul style="list-style-type: none"> <li>• Information, Education and Communication (IEC)</li> </ul>	<ul style="list-style-type: none"> <li>• Designing skills (AUTOCAD, Photoshop etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Leadership and Team building</li> </ul>
Sub-themes highlighted by technical posts →	Very high priority	<ul style="list-style-type: none"> <li>• Project Management</li> <li>• Preparation of Project proposals, RFP, contracts</li> </ul>	--	--
	High priority	--	<ul style="list-style-type: none"> <li>• Mapping skills (GIS)</li> </ul>	<ul style="list-style-type: none"> <li>• Human resource management</li> </ul>
	Low priority	--	<ul style="list-style-type: none"> <li>• Transport modelling</li> <li>• Office Package (Word, Excel, Powerpoint)</li> </ul>	<ul style="list-style-type: none"> <li>• Leadership and Team building</li> </ul>

### Annexe 3.7. PWD of Group I – Knowledge-based training needs

Themes →		Street infrastructure planning and design
Sub-themes highlighted by managerial posts →	Very high priority	<ul style="list-style-type: none"> <li>• Complete street design</li> <li>• Safe Intersection Design</li> <li>• Tactical Urbanism</li> </ul>
	High priority	--
	Low priority	<ul style="list-style-type: none"> <li>• Road network planning</li> <li>• Universal Accessibility Principles</li> </ul>
Sub-themes highlighted by technical posts →	Very high priority	<ul style="list-style-type: none"> <li>• Safe Intersection Design</li> <li>• Universal Accessibility Principles</li> </ul>
	High priority	<ul style="list-style-type: none"> <li>• Complete street design</li> <li>• Road network planning</li> <li>• Tactical Urbanism</li> </ul>
	Low priority	--

### Annexe 3.8. PWD of Group I – Skill-based training needs

Themes →		Project planning and communication skills	Functional skills	Interpersonal skills
Sub-themes highlighted by managerial posts →	Very high priority	<ul style="list-style-type: none"> <li>• Project Management</li> <li>• Preparation of Project proposals, RFP, Contracts</li> </ul>	--	<ul style="list-style-type: none"> <li>• Leadership and Team building</li> <li>• Human resource management</li> </ul>
	High priority	<ul style="list-style-type: none"> <li>• Information, Education and Communication (IEC)</li> <li>• Media and social media engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Data collection and analysis</li> <li>• Designing skills (AUTOCAD, Photoshop etc.)</li> <li>• Mapping skills (GIS)</li> </ul>	--
	Low priority	--	<ul style="list-style-type: none"> <li>• Traffic and urban transport surveys - conducting and managing</li> <li>• 3D Modelling (BIM, REVIT)</li> </ul>	--

Sub-themes highlighted by technical posts →	Very high priority	<ul style="list-style-type: none"> <li>Preparation of Project proposals, RFP, contracts</li> </ul>	--	--
	High priority	--	<ul style="list-style-type: none"> <li>Designing skills (AUTOCAD, Photoshop etc.)</li> <li>Mapping skills (GIS)</li> </ul>	<ul style="list-style-type: none"> <li>Leadership and Team building</li> </ul>
	Low priority	<ul style="list-style-type: none"> <li>Project Management</li> <li>Information, Education and Communication (IEC)</li> <li>Media and social media engagement</li> <li>Modern finance mechanisms (PPP, municipal bonds, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Traffic and urban transport surveys - conducting and managing</li> <li>Data collection and analysis techniques</li> <li>Office Package (Word, Excel, Powerpoint)</li> <li>3D Modelling (BIM, REVIT)</li> </ul>	<ul style="list-style-type: none"> <li>Human resource management</li> </ul>

### Annexe 3.9. PWD of Group II – Knowledge-based training needs

Themes →		Street infrastructure planning and design
Sub-themes highlighted by managerial posts →	Very high priority	<ul style="list-style-type: none"> <li>Tactical Urbanism</li> </ul>
	High priority	<ul style="list-style-type: none"> <li>Complete street design</li> <li>Road network planning</li> <li>Safe Intersection Design</li> <li>Universal Accessibility Principles</li> </ul>
	Low priority	<ul style="list-style-type: none"> <li>Gender sensitive planning approaches</li> <li>Bus stop infrastructure planning and design</li> <li>Non-motorised transport (NMT) infrastructure planning and design</li> </ul>
Sub-themes highlighted by technical posts →	Very high priority	<ul style="list-style-type: none"> <li>Safe Intersection Design</li> <li>Tactical Urbanism</li> </ul>
	High priority	<ul style="list-style-type: none"> <li>Complete street design</li> <li>Road network planning</li> <li>Universal Accessibility Principles</li> </ul>
	Low priority	<ul style="list-style-type: none"> <li>Gender sensitive planning approaches</li> <li>Bus stop infrastructure planning and design</li> </ul>

### Annexe 3.10. PWD of Group II – Skill-based training needs

Themes →		Project planning and communication skills	Functional skills	Interpersonal skills
Sub-themes highlighted by managerial posts →	Very high priority	<ul style="list-style-type: none"> <li>Project Management</li> <li>Preparation of Project proposals, RFP, and contracts</li> </ul>	<ul style="list-style-type: none"> <li>Designing skills (AUTOCAD, Photoshop, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Leadership and Team building</li> </ul>
	High priority	<ul style="list-style-type: none"> <li>Media and social media engagement</li> </ul>	<ul style="list-style-type: none"> <li>Office Package (Word, Excel, Powerpoint)</li> <li>Mapping skills (GIS)</li> </ul>	<ul style="list-style-type: none"> <li>Human resource management</li> </ul>
	Low priority	<ul style="list-style-type: none"> <li>Information, Education and Communication (IEC)</li> </ul>	<ul style="list-style-type: none"> <li>Traffic and urban transport surveys - conducting and managing</li> <li>Data collection and analysis techniques</li> <li>3D Modelling (BIM, REVIT)</li> </ul>	--
Sub-themes highlighted by technical posts →	Very high priority	<ul style="list-style-type: none"> <li>Preparation of Project proposals, RFP, contracts</li> </ul>	<ul style="list-style-type: none"> <li>Designing skills (AUTOCAD, Photoshop etc.)</li> <li>Mapping skills (GIS)</li> </ul>	--
	High priority	<ul style="list-style-type: none"> <li>Project Management</li> </ul>	<ul style="list-style-type: none"> <li>Office Package (Word, Excel, Powerpoint)</li> </ul>	<ul style="list-style-type: none"> <li>Leadership and Team building</li> <li>Human resource management</li> </ul>
	Low priority	<ul style="list-style-type: none"> <li>Information, Education and Communication (IEC)</li> <li>Media and social media engagement</li> </ul>	<ul style="list-style-type: none"> <li>Traffic and urban transport surveys - conducting and managing</li> <li>Data collection and analysis techniques</li> <li>3D Modelling (BIM, REVIT)</li> </ul>	--

### Annexe 3.11. City Transport Undertakings of Group I – Knowledge-based training needs

Themes →		Street infrastructure planning and design	Bus Transportation Planning	Urban and transport planning	Electric mobility planning
Sub-themes highlighted by managerial posts →	Very high priority	<ul style="list-style-type: none"> <li>Bus stop infrastructure planning and design</li> </ul>	<ul style="list-style-type: none"> <li>Planning/Integrating bus transport with paratransit (autos/e-rickshaws)</li> <li>Last mile connectivity to buses</li> </ul>	<ul style="list-style-type: none"> <li>Growth forecasting and scenarios</li> </ul>	<ul style="list-style-type: none"> <li>Route selection, Operations Planning and Scheduling of E-bus fleet</li> <li>Integrating electric mobility in regional (mofussil) connectivity</li> <li>Depot infrastructure and equipment planning</li> <li>Service monitoring and evaluation mechanisms</li> </ul>
	High priority	<ul style="list-style-type: none"> <li>Universal Accessibility Principles</li> <li>Tactical Urbanism</li> </ul>	<ul style="list-style-type: none"> <li>Bus resource requirements</li> <li>Service level benchmarking for bus systems</li> <li>Bus contracts and PPP models</li> <li>Financing and fare practices in bus systems</li> </ul>	<ul style="list-style-type: none"> <li>Land use and transport integration</li> <li>Transit oriented development (TOD)</li> <li>Multi modal integration</li> </ul>	<ul style="list-style-type: none"> <li>Charging Infrastructure network planning</li> </ul>
	Low priority	--	<ul style="list-style-type: none"> <li>Bus route planning</li> <li>Bus route rationalisation</li> </ul>	<ul style="list-style-type: none"> <li>Gender sensitive planning approaches</li> </ul>	<ul style="list-style-type: none"> <li>Introduction to electric mobility</li> <li>Investments and financing for different procurement models</li> <li>Electric mobility policy and regulations landscape</li> </ul>
Sub themes highlighted by technical posts	Very high priority	--	<ul style="list-style-type: none"> <li>Service level benchmarking for bus systems</li> <li>Bus route planning</li> <li>Bus route rationalisation</li> </ul>	<ul style="list-style-type: none"> <li>Growth forecasting and scenarios</li> <li>Multi modal integration</li> </ul>	<ul style="list-style-type: none"> <li>Route selection, Operations Planning and Scheduling of E-bus fleet</li> <li>Charging Infrastructure network planning</li> </ul>

→	High priority	<ul style="list-style-type: none"> <li>• Universal Accessibility Principles</li> </ul>	<ul style="list-style-type: none"> <li>• Planning/Integrating bus transport with paratransit</li> <li>• Bus resource requirements</li> <li>• Last mile connectivity to buses</li> </ul>	<ul style="list-style-type: none"> <li>• Transit oriented development (TOD)</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to electric mobility</li> <li>• Service monitoring and evaluation mechanisms</li> <li>• Electric mobility policy and regulations landscape</li> </ul>
	Low priority	<ul style="list-style-type: none"> <li>• Bus stop infrastructure planning and design</li> <li>• Tactical Urbanism</li> </ul>	<ul style="list-style-type: none"> <li>• Financing and fare practices in bus systems</li> </ul>	<ul style="list-style-type: none"> <li>• Low Emission Zone planning</li> </ul>	<ul style="list-style-type: none"> <li>• Integrating electric mobility in regional (mofussil) connectivity</li> <li>• Depot infrastructure and equipments planning</li> <li>• Investments and financing for different procurement models</li> </ul>

### Annexe 3.12. City Transport Undertakings (CTUs) of Group I – Skill-based training needs

Themes →		Project planning and communication skills	Functional skills	Interpersonal skills
Sub-themes highlighted by managerial posts	Very high priority	--	--	--
	High priority	--	--	--
→	Low priority	<ul style="list-style-type: none"> <li>• Project Management</li> </ul>	<ul style="list-style-type: none"> <li>• Traffic and urban transport surveys</li> <li>• Data collection and analysis</li> <li>• Mapping skills (GIS)</li> </ul>	<ul style="list-style-type: none"> <li>• Human resource management</li> </ul>
Sub-themes highlighted by technical posts	Very high priority	--	<ul style="list-style-type: none"> <li>• Transport modelling</li> <li>• Traffic and urban transport surveys</li> <li>• Data collection and analysis</li> </ul>	--
	High priority	<ul style="list-style-type: none"> <li>• Project Management</li> </ul>		<ul style="list-style-type: none"> <li>• Human resource management</li> </ul>
→	Low priority	<ul style="list-style-type: none"> <li>• Media and social media engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Office Package (Word, Excel, Powerpoint)</li> <li>• Mapping skills (GIS)</li> </ul>	--

### Annexe 3.13. City Transport Undertakings (CTUs) of Group II – Knowledge-based training needs

Themes →		Street infrastructure planning and design	Bus Transportation Planning	Urban and transport planning	Electric mobility planning
Sub-themes highlighted by managerial posts →	Very high priority	--	<ul style="list-style-type: none"> <li>• Bus resource requirements</li> <li>• Service level benchmarking for bus systems</li> <li>• Last mile connectivity to buses</li> <li>• Bus contracts and PPP models</li> </ul>	<ul style="list-style-type: none"> <li>• Transit oriented development (TOD)</li> <li>• Growth forecasting and scenarios</li> <li>• Multi modal integration</li> </ul>	--
	High priority	<ul style="list-style-type: none"> <li>• Bus stop infrastructure planning and design</li> <li>• Universal Accessibility Principles</li> </ul>	<ul style="list-style-type: none"> <li>• Planning/Integrating bus transport with paratransit (autos/e-rickshaws)</li> <li>• Bus route rationalisation</li> </ul>	<ul style="list-style-type: none"> <li>• Land use and transport integration</li> </ul>	<ul style="list-style-type: none"> <li>• Charging Infrastructure network planning</li> <li>• Service monitoring and evaluation mechanisms</li> </ul>
	Low priority	<ul style="list-style-type: none"> <li>• Tactical Urbanism</li> </ul>	--	<ul style="list-style-type: none"> <li>• Low Emission Zone planning</li> </ul>	<ul style="list-style-type: none"> <li>• Integrating electric mobility in regional (mofussil) connectivity</li> <li>• Depot infrastructure and equipment planning</li> <li>• Electric mobility policy and regulations landscape</li> </ul>
Sub themes highlighted by technical posts →	Very high priority	<ul style="list-style-type: none"> <li>• Bus stop infrastructure planning and design</li> <li>• Universal Accessibility Principles</li> </ul>	<ul style="list-style-type: none"> <li>• Service level benchmarking for bus systems</li> <li>• Last mile connectivity to buses</li> </ul>	<ul style="list-style-type: none"> <li>• Transit-oriented development (TOD)</li> <li>• Growth forecasting and scenarios</li> </ul>	<ul style="list-style-type: none"> <li>• Charging Infrastructure network planning</li> <li>• Depot infrastructure and equipment planning</li> <li>• Electric mobility policy and regulations landscape</li> </ul>
	High priority	--	--	<ul style="list-style-type: none"> <li>• Multi modal integration</li> <li>• Gender sensitive planning approaches</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to electric mobility</li> <li>• Route selection, Operations Planning and Scheduling of E-bus fleet</li> </ul>

					<ul style="list-style-type: none"> <li>Integrating electric mobility in regional (mofussil) connectivity</li> <li>Service monitoring and evaluation mechanisms</li> </ul>
	Low priority	<ul style="list-style-type: none"> <li>Tactical Urbanism</li> </ul>	<ul style="list-style-type: none"> <li>Planning/Integrating bus transport with paratransit (autos/e-rickshaws)</li> <li>Bus route planning</li> <li>Bus route rationalisation</li> <li>Financing and fare practices in bus systems</li> </ul>	<ul style="list-style-type: none"> <li>Land use and transport integration</li> <li>Low Emission Zone planning</li> </ul>	--

### Annexe 3.14. CTU of Group II – Skill-based training needs

Themes →		Project planning and communication skills	Functional skills	Interpersonal skills
Sub-themes highlighted by managerial posts →	Very high priority	--	<ul style="list-style-type: none"> <li>Transport modelling</li> <li>Data collection and analysis</li> <li>Mapping skills (GIS)</li> </ul>	--
	High priority	<ul style="list-style-type: none"> <li>Preparation of Project proposals, RFP, contracts</li> </ul>	<ul style="list-style-type: none"> <li>Traffic and urban transport surveys - conducting and managing</li> </ul>	--
	Low priority	<ul style="list-style-type: none"> <li>Information, Education and Communication (IEC)</li> <li>Media and social media engagement</li> </ul>	<ul style="list-style-type: none"> <li>Office Package (Word, Excel, Powerpoint)</li> </ul>	<ul style="list-style-type: none"> <li>Leadership and Team building</li> </ul>
Sub-themes highlighted by technical posts →	Very high priority	--	<ul style="list-style-type: none"> <li>Traffic and urban transport surveys - conducting and managing</li> </ul>	--
	High priority	--	--	--
	Low priority	<ul style="list-style-type: none"> <li>Information, Education and Communication (IEC)</li> </ul>	<ul style="list-style-type: none"> <li>Office Package (Word, Excel, Powerpoint)</li> <li>Mapping skills (GIS)</li> </ul>	<ul style="list-style-type: none"> <li>Human resource management</li> </ul>

### Annexe 3.15. Transport department – Knowledge-based training needs

Themes →		Street infrastructure planning and design	Bus Transportation Planning	Urban and transport planning	Electric mobility planning
Sub-themes highlighted by managerial posts →	Very high priority	--	--	--	<ul style="list-style-type: none"> <li>• Introduction to electric mobility</li> <li>• Route selection, Operations Planning and Scheduling of E-bus fleet</li> <li>• Integrating electric mobility in regional (mofussil) connectivity</li> <li>• Electric mobility policy and regulations landscape</li> </ul>
	High priority	<ul style="list-style-type: none"> <li>• Non-motorised transport (NMT) infrastructure planning and design</li> <li>• Road safety audits</li> </ul>	--	--	--
	Low priority	--	--	<ul style="list-style-type: none"> <li>• Multi modal integration</li> <li>• Gender sensitive planning approaches</li> </ul>	<ul style="list-style-type: none"> <li>• Charging Infrastructure network planning</li> </ul>
Sub themes highlighted by technical posts →	Very high priority	--	--	--	<ul style="list-style-type: none"> <li>• Introduction to electric mobility</li> <li>• Route selection, Operations Planning and Scheduling of E-bus fleet</li> <li>• Electric mobility policy and regulations landscape</li> </ul>
	High priority	<ul style="list-style-type: none"> <li>• Road safety audits</li> </ul>	--	<ul style="list-style-type: none"> <li>• Multi modal integration</li> </ul>	<ul style="list-style-type: none"> <li>• Integrating electric mobility in regional (mofussil) connectivity</li> </ul>

	Low priority	<ul style="list-style-type: none"> <li>• Non-motorised transport (NMT) infrastructure planning and design</li> <li>• Safe Intersection Design</li> <li>• Universal Accessibility Principles</li> </ul>	<ul style="list-style-type: none"> <li>• Planning/Integrating bus transport with paratransit (autos/e-rickshaws)</li> </ul>	--	<ul style="list-style-type: none"> <li>• Charging Infrastructure network planning</li> </ul>
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### Annexe 3.16. Transport Department – Skill-based training needs

Themes →		Project planning and communication skills	Functional skills	Interpersonal skills
Sub-themes highlighted by managerial posts →	Very high priority	<ul style="list-style-type: none"> <li>• Information, Education and Communication (IEC)</li> </ul>	<ul style="list-style-type: none"> <li>• Traffic and urban transport surveys - conducting and managing</li> </ul>	<ul style="list-style-type: none"> <li>• Leadership and Team building</li> <li>• Human resource management</li> </ul>
	High priority	<ul style="list-style-type: none"> <li>• Preparation of Project proposals, RFP, contracts</li> <li>• Media and social media engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Office Package (Word, Excel, Powerpoint)</li> </ul>	--
	Low priority	--	<ul style="list-style-type: none"> <li>• Data collection and analysis techniques</li> </ul>	--
Sub-themes highlighted by technical posts →	Very high priority	<ul style="list-style-type: none"> <li>• Preparation of Project proposals, RFP, contracts</li> <li>• Information, Education and Communication (IEC)</li> </ul>	<ul style="list-style-type: none"> <li>• Transport modelling</li> </ul>	<ul style="list-style-type: none"> <li>• Leadership and Team building</li> <li>• Human resource management</li> </ul>
	High priority	<ul style="list-style-type: none"> <li>• Project Management</li> <li>• Media and social media engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Office Package (Word, Excel, Powerpoint)</li> </ul>	--
	Low priority	--	<ul style="list-style-type: none"> <li>• Traffic and urban transport surveys - conducting and managing</li> </ul>	--

### Annexe 3.17. Traffic Police – Knowledge-based training needs

Themes →		Street infrastructure planning and design	Parking Planning	Urban and transport planning	Electric mobility planning
Sub-themes highlighted by managerial posts →	Very high priority	<ul style="list-style-type: none"> <li>Road safety audits</li> <li>Crash investigations</li> </ul>	<ul style="list-style-type: none"> <li>Developing parking policy</li> </ul>	--	--
	High priority	<ul style="list-style-type: none"> <li>Non-motorised transport (NMT) infrastructure planning and design</li> </ul>	<ul style="list-style-type: none"> <li>Developing area based parking strategies</li> </ul>	--	--
	Low priority	<ul style="list-style-type: none"> <li>Safe Intersection Design</li> <li>Universal Accessibility Principles</li> <li>Gender sensitive planning approaches</li> </ul>	<ul style="list-style-type: none"> <li>Parking standards and guidelines</li> </ul>	--	--
Sub themes highlighted by technical posts →	Very high priority	<ul style="list-style-type: none"> <li>Road safety audits</li> <li>Crash investigations</li> </ul>	<ul style="list-style-type: none"> <li>Developing parking policy</li> </ul>	--	--
	High priority	<ul style="list-style-type: none"> <li>Safe Intersection Design</li> <li>Universal Accessibility Principles</li> <li>Complete street design</li> </ul>	<ul style="list-style-type: none"> <li>Parking standards and guidelines</li> </ul>	--	--
	Low priority	<ul style="list-style-type: none"> <li>Tactical Urbanism</li> </ul>	--	--	<ul style="list-style-type: none"> <li>Introduction to electric mobility</li> <li>Charging Infrastructure network planning</li> </ul>

### Annexe 3.18. Traffic Police – Skill-based training needs

Themes →		Project planning and communication skills	Functional skills	Interpersonal skills
Sub-themes highlighted by managerial posts →	Very high priority	--	<ul style="list-style-type: none"> <li>Traffic and urban transport surveys - conducting and managing</li> </ul>	<ul style="list-style-type: none"> <li>Leadership and Team building</li> </ul>
	High priority	<ul style="list-style-type: none"> <li>Information, Education and Communication (IEC)</li> </ul>	--	--
	Low priority	<ul style="list-style-type: none"> <li>Project Management</li> </ul>	<ul style="list-style-type: none"> <li>Data collection and analysis techniques</li> </ul>	<ul style="list-style-type: none"> <li>Human resource management</li> </ul>
Sub-themes highlighted by technical posts →	Very high priority	<ul style="list-style-type: none"> <li>Information, Education and Communication (IEC)</li> </ul>	--	<ul style="list-style-type: none"> <li>Leadership and Team building</li> </ul>
	High priority	<ul style="list-style-type: none"> <li>Media and social media engagement</li> </ul>	--	--
	Low priority	<ul style="list-style-type: none"> <li>Project Management</li> </ul>	<ul style="list-style-type: none"> <li>Traffic and urban transport surveys - conducting and managing</li> <li>Data collection and analysis techniques</li> </ul>	<ul style="list-style-type: none"> <li>Human resource management</li> </ul>