



## **PROJECT IMPLEMENTATION**

### **AN OVERVIEW –December 2022**



Government of India

**Ministry of Statistics and Programme Implementation**

Infrastructure and Project Monitoring Division

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Khurshid Lal Bhawan, Janpath

New Delhi-110001

Website: [www.cspm.gov.in](http://www.cspm.gov.in)

## Role of Infrastructure and Project Monitoring Division (IPMD)

- Monitoring the progress of the Central Sector Infrastructure Projects costing Rs. 150 crore and above
- Monitoring the performance of 11 key Infrastructure Sectors

### Objectives of Project Monitoring

- To enhance effectiveness of project implementation
- To facilitate information flow for effective decision making
- To resolve outstanding implementation issues
- To bring about system improvement
- To promote best management practices

### Implementation Status of Central Sector Projects

As on 01.01.2023, **1,438** projects with anticipated completion cost of Rs. **20,35,794.75** crore were on the monitor of the Ministry. For the purpose of monitoring, these projects have been categorised into two categories:

As on 1 <sup>st</sup> January 2023			
SN	Category	No. of Projects	Anticipated Cost (Rs. in crore)
<b>1</b>	Mega (Rs. 1000 crore and above)	387	<b>16,03,965.08</b>
<b>2</b>	Major (Rs. 150 crore to less than Rs. 1000 crore)	1051	<b>4,31,829.67</b>
	<b>TOTAL</b>	<b>1,438</b>	<b>20,35,794.75</b>

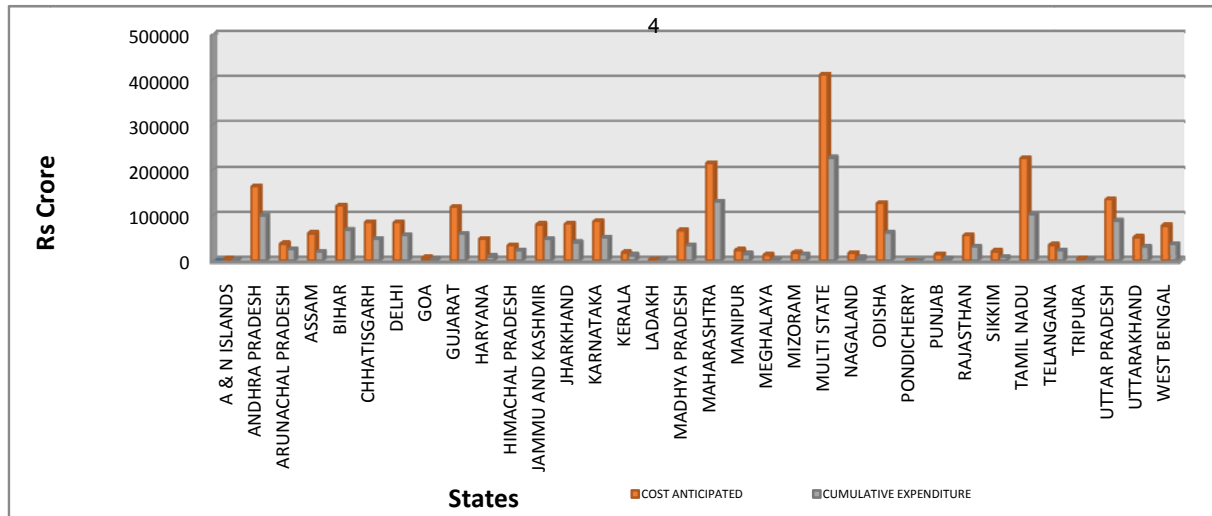
The projects are monitored on sectoral and geo-physical basis. The key financial parameters of the monitored projects have been highlighted in the following tables:

**STATUS OF CENTRAL SECTOR PROJECTS COSTING Rs.150 CRORE AND ABOVE(December 2022)**

(All Cost /Expenditure in Rs. crore)

S.No.	State Name	No. of Projects	Original Cost	Anticipated Cost	Cumulative Expenditure
1	A & N ISLANDS	9	2888.63	3159.99	1472.08
2	ANDHRA PRADESH	59	103491.89	156519.80	90912.31
3	ARUNACHAL PRADESH	40	22935.53	36938.11	24946.98
4	ASSAM	50	51777.73	60726.15	21680.53
5	BIHAR	73	94373.29	117857.34	67552.85
6	CHHATISGARH	37	73667.66	83782.60	47971.99
7	DELHI	25	80712.77	83866.59	55566.15
8	GOA	11	6491.46	6522.07	3114.64
9	GUJARAT	53	99594.83	114436.79	56756.77
10	HARYANA	18	47194.95	48213.39	9527.59
11	HIMACHAL PRADESH	20	20917.45	33338.51	22786.17
12	JAMMU AND KASHMIR	26	43467.50	77979.76	43860.82
13	JHARKHAND	47	73139.63	80162.55	40727.92
14	KARNATAKA	46	76486.21	84583.99	50759.32
15	KERALA	13	14430.79	17461.84	12149.54
16	LADAKH	8	2633.23	2767.29	705.95
17	MADHYA PRADESH	65	59370.81	67780.65	33570.15
18	MAHARASHTRA	214	189658.17	213691.79	126352.43
19	MANIPUR	30	13658.23	23526.85	15121.40
20	MEGHALAYA	14	5453.22	12816.42	2458.80
21	MIZORAM	25	12450.29	17404.99	13000.29
22	MULTI STATE	75	300539.31	406178.46	228123.03
23	NAGALAND	34	12347.20	16697.61	6189.98
24	ODISHA	79	114241.90	122958.20	59256.68
25	PONDICHERRY	1	195.00	195.00	125.35
26	PUNJAB	20	13636.93	13465.93	4587.22
27	RAJASTHAN	36	50164.59	55316.15	30507.32
28	SIKKIM	21	14350.32	20933.41	7531.50
29	TAMIL NADU	58	197834.12	220032.31	101425.26
30	TELANGANA	44	28270.36	30617.22	22285.73
31	TRIPURA	17	4228.54	4460.98	1731.73
32	UTTAR PRADESH	87	112529.34	124039.17	78505.49
33	UTTARAKHAND	27	33524.87	51745.01	30188.25
34	WEST BENGAL	56	59138.00	75892.60	34341.94
	<b>Grand Total</b>	<b>1438</b>	<b>2035794.75</b>	<b>2486069.52</b>	<b>1345794.16</b>

# STATE WISE STATUS OF CENTRAL SECTOR PROJECTS COSTING Rs 150 CRORE AND ABOVE



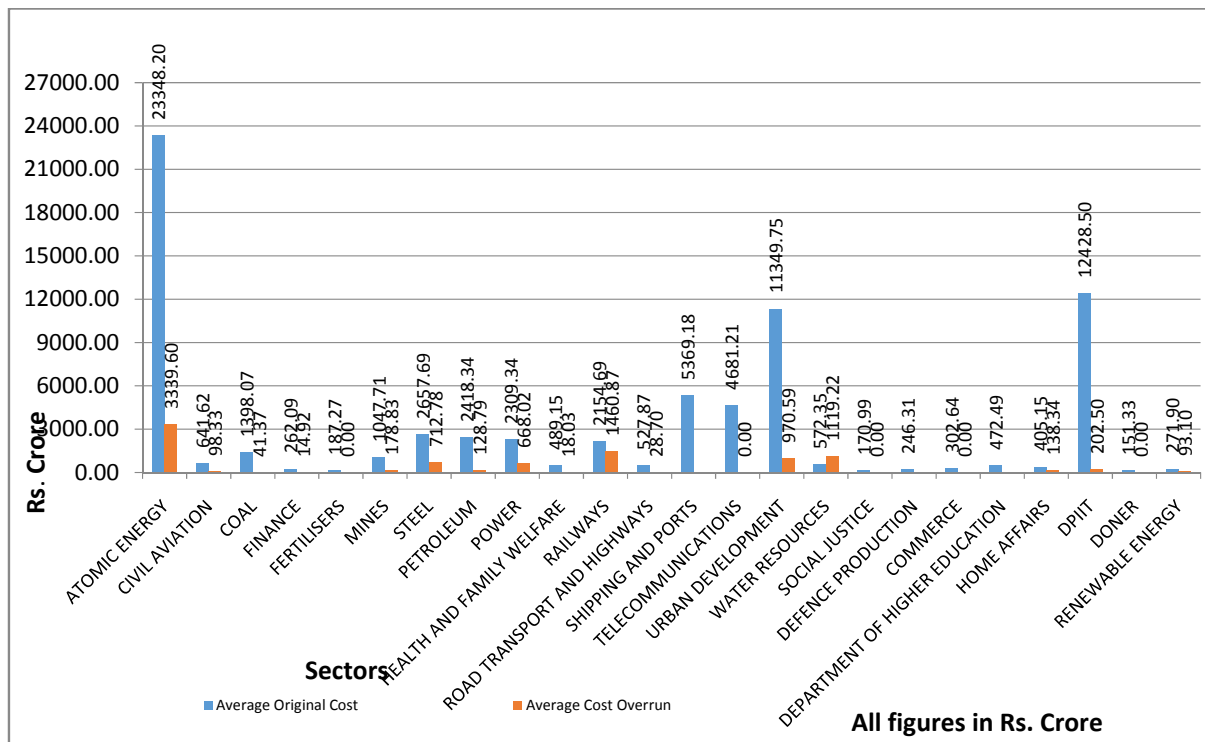
## Sector-Wise analysis of Cost Overrun in projects

All Cost in Rs. Crore

S.No.	Sector	Total Projects	Cost Original	Cost Latest	Cost Anticipated	Cost Overrun w.r.t original	Cost Overrun w.r.t latest
1	ATOMIC ENERGY	5	1,16,741.00	1,32,609.00	1,33,439.00	16,698.00	830.00
2	CIVIL AVIATION	26	16,682.02	17,105.79	19,238.66	2,556.64	2,132.87
3	COAL	122	1,70,564.43	1,70,705.46	1,75,611.30	5,046.87	4,905.84
4	FINANCE	3	786.27	778.04	831.04	44.77	53.00
5	FERTILISERS	1	187.27	187.27	187.27	0.00	0.00
6	MINES	7	7,333.99	8,585.77	8,585.77	1,251.78	0.00
7	STEEL	9	23,919.19	30,334.19	30,334.19	6,415.00	0.00
8	PETROLEUM	158	3,82,097.19	4,01,318.51	4,02,446.01	20,348.82	1,127.50
9	POWER	80	1,84,746.91	2,17,713.13	2,38,188.70	53,441.79	20,475.57
10	HEALTH AND FAMILY WELFARE	28	13,696.26	13,711.40	14,200.97	504.71	489.57
11	RAILWAYS	173	3,72,761.45	4,87,212.21	6,25,491.15	2,52,729.70	1,38,278.94
12	ROAD TRANSPORT AND HIGHWAYS	724	3,82,180.34	4,03,894.78	4,02,958.36	20,778.02	-936.42
13	SHIPPING AND PORTS	1	5,369.18	4,633.81	4,633.81	-735.37	0.00
14	TELECOMMUNICATIONS	3	14,043.62	14,043.62	14,043.62	0.00	0.00
15	URBAN DEVELOPMENT	25	2,83,743.73	2,83,743.73	3,08,008.53	24,264.80	24,264.80
16	WATER RESOURCES	41	23,466.28	69,354.43	69,354.43	45,888.15	0.00
17	SOCIAL JUSTICE	1	170.99	170.99	170.99	0.00	0.00
18	DEFENCE PRODUCTION	1	246.31	210	200	-46.31	-10.00
19	COMMERCE	1	302.64	302.64	302.64	0.00	0.00
20	DEPARTMENT OF HIGHER EDUCATION	20	9,449.72	9,425.47	9,347.30	-102.42	-78.17

21	HOME AFFAIRS	5	2,025.73	2,589.74	2,717.45	691.72	127.71
22	DPIIT	2	24,857.00	24,857.00	25,262.00	405.00	405.00
23	DONER	1	151.33	151.33	151.33	0.00	0.00
24	RENEWABLE ENERGY	1	271.9	271.9	365	93.10	93.10
	1438	2035794.75	2293910.21	2486069.52	4,50,274.77	1,92,159.31	1438

## Average original cost & Average cost overrun in different Sectors



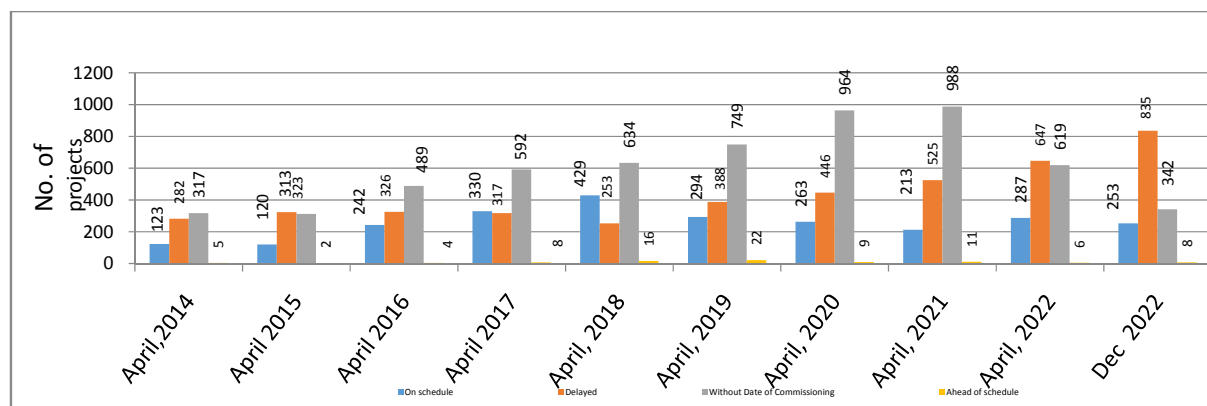
## Current Scenario of Projects

- Total 1438 projects are on the monitor of this Ministry
- 8 Projects are ahead of schedule
- 253 Projects are on schedule
- 835 Projects are delayed
- 343 Projects have cost overruns.
- 342 Projects have been reported with inadequate information about commissioning schedule.

## Highlights of the on-going projects<sup>6</sup> (as on 01.01.2023)

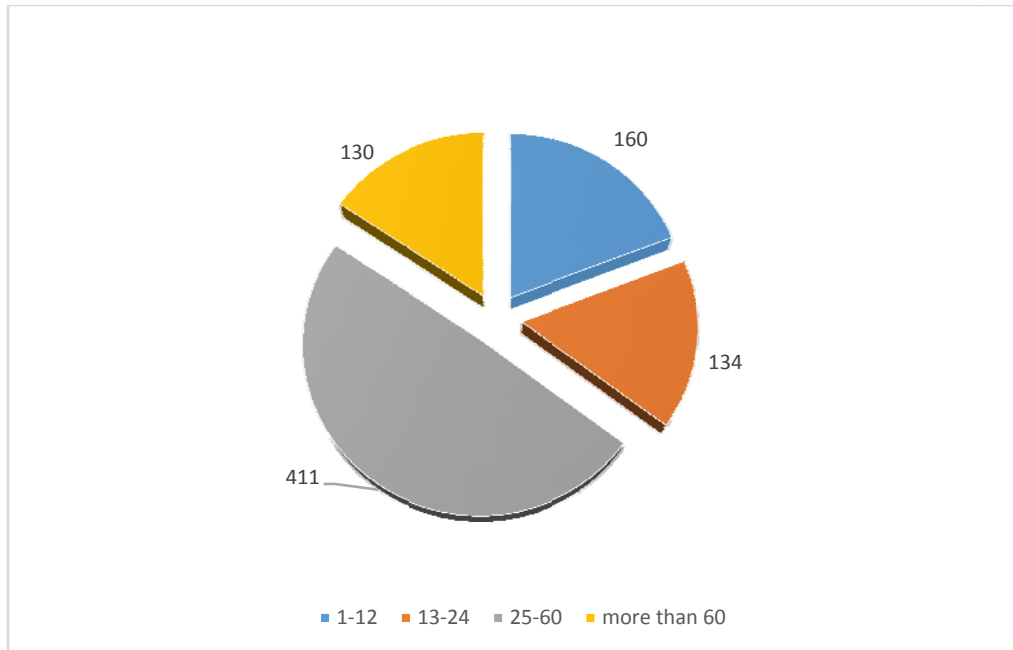
Total number of projects on the monitor	1438
Total Original cost of 1438 projects	Rs. 20,35,794.75crore
Total anticipated cost of these projects	Rs 24,86,069.52crore
Cumulative Expenditure till March 2022	Rs. 1185426.49crore
Expenditure during current month (December2022)	Rs. 1140219.93 crore
Expenditure in CFYR up to December2022	Rs. 2,05,574.23 crore
Cumulative Expenditure till December2022	Rs. 1345794.16 crore
Overall percentage cost overrun with respect to original cost	22.12%
Overall percentage cost overrun with respect to latest sanctioned cost	8.38%
Total number of projects showing cost overrun w.r.t original approved cost	343
Total number of projects showing time overrun w.r.t original Schedule	835 (Ranging from 1 to 276 months)
Percentage cost overrun in 756delayed Projects	29.41 %
No. of projects completed during the month	49

## Trend in Projects during Previous Years



## Break-up of 835delayed (in months) projects in December 2022

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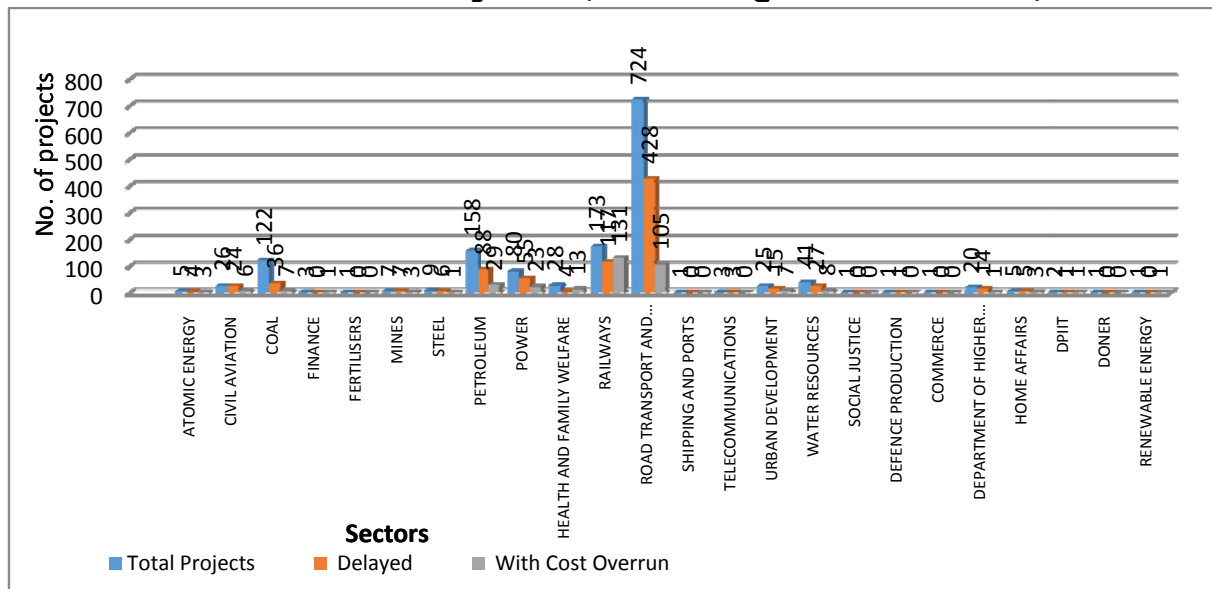


### Status of Projects Showing Cost and Time Overrun

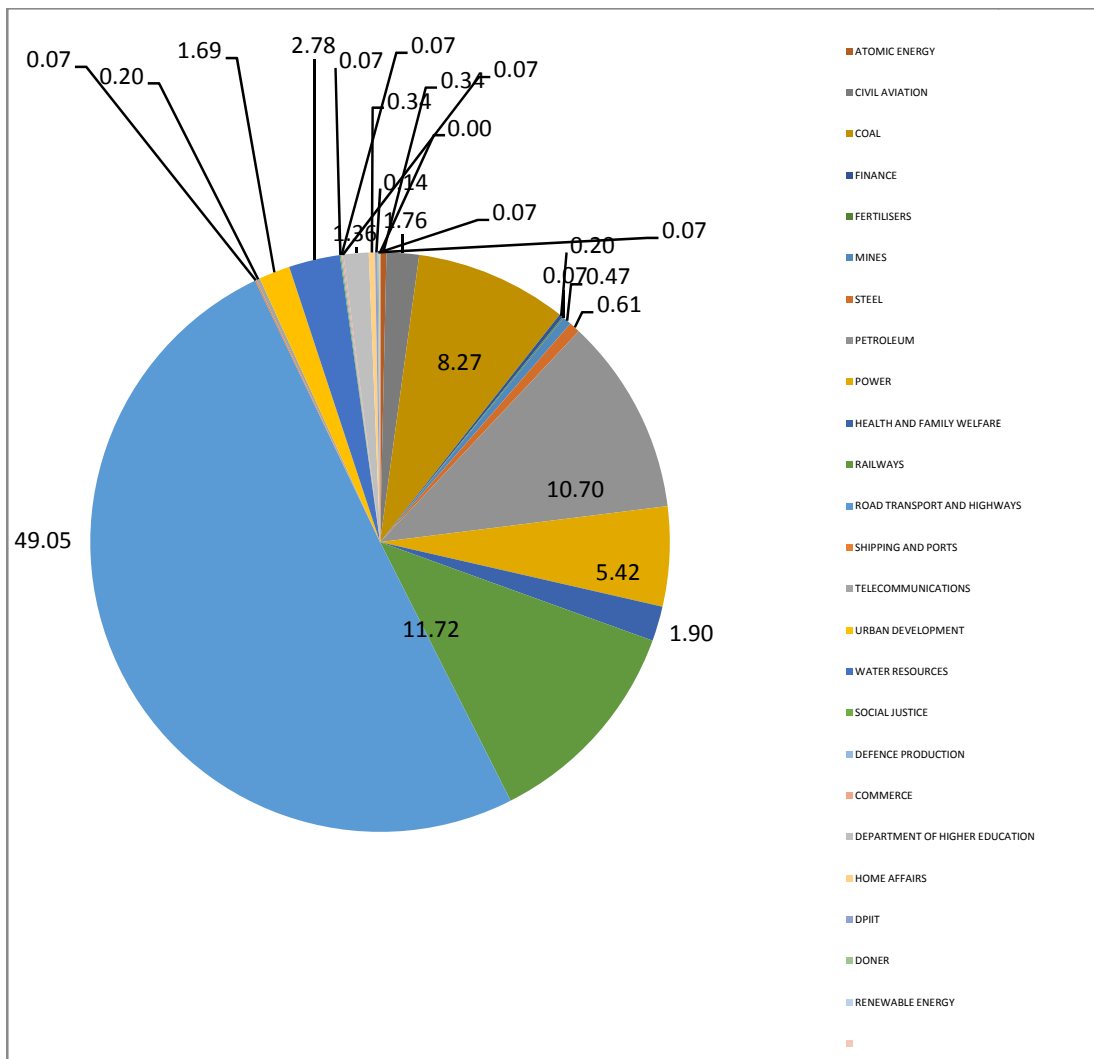
Status of Projects (as on 01.01.2023)

Sr. No.	Sector	Total Projects	Projects Having			
			Delay		Cost Overrun	
			w.r.t. Original schedule	w.r.t. Revised schedule	w.r.t. Original schedule	w.r.t. Revised schedule
1	ATOMIC ENERGY	5	4	4	3	1
2	CIVIL AVIATION	26	24	21	6	3
3	COAL	122	36	34	7	4
4	FINANCE	3	0	0	1	1
5	FERTILISERS	1	0	0	0	0
6	MINES	7	7	2	3	0
7	STEEL	9	6	5	1	0
8	PETROLEUM	158	88	44	29	7
9	POWER	80	55	40	23	19
10	HEALTH AND FAMILY WELFARE	28	4	4	13	13
11	RAILWAYS	173	117	99	131	113
12	ROAD TRANSPORT AND HIGHWAYS	724	428	365	105	94
13	SHIPPING AND PORTS	1	0	0	0	0
14	TELECOMMUNICATIONS	3	3	3	0	0
15	URBAN DEVELOPMENT	25	15	9	7	7
16	WATER RESOURCES	41	27	26	8	0
17	SOCIAL JUSTICE	1	0	0	0	0
18	DEFENCE PRODUCTION	1	1	1	0	0
19	COMMERCE	1	0	0	0	0
20	DEPARTMENT OF HIGHER EDUCATION	20	14	12	1	0
21	HOME AFFAIRS	5	5	3	3	2
22	DPIIT	2	1	1	1	1
23	DONER	1	0	0	0	0
24	RENEWABLE ENERGY	1	0	0	1	1
TOTAL		1438	835	673	343	266

## Sector-wise Status of Projects (w.r.t. original schedules)



## Sectoral break up of on-going infrastructure projects





## **Reasons for Time Overrun**

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- Delay in land acquisition
- Delay in obtaining forest/environment clearances
- Lack of infrastructure support and linkages
- Delay in tie-up of project financing
- Delay in finalization of detailed engineering
- Changes in scope
- Delay in tendering, ordering and equipment supply
- Law & Order problems
- Geological surprises.
- Pre-commissioning teething troubles
- Contractual issues
- Encroachment
- Inadequate manpower
- Delay in technical approval.
- State wise lockdown due to COVID 19
- Delayed due to financial Issues.
- Court cases
- Delay in getting clearance local authorities.

## **Causes of Cost Escalation**

- Under-estimation of original cost
- Changes in rates of foreign exchange and statutory duties
- High cost of environmental safeguards and rehabilitation measures
- Spiralling land acquisition costs
- Changes in scope of projects
- Monopolistic pricing by vendors of equipment services
- General Price rise / inflation
- Disturbed conditions
- Time Overrun

## **Action taken by the Government to Minimise Time and cost overruns in Projects**

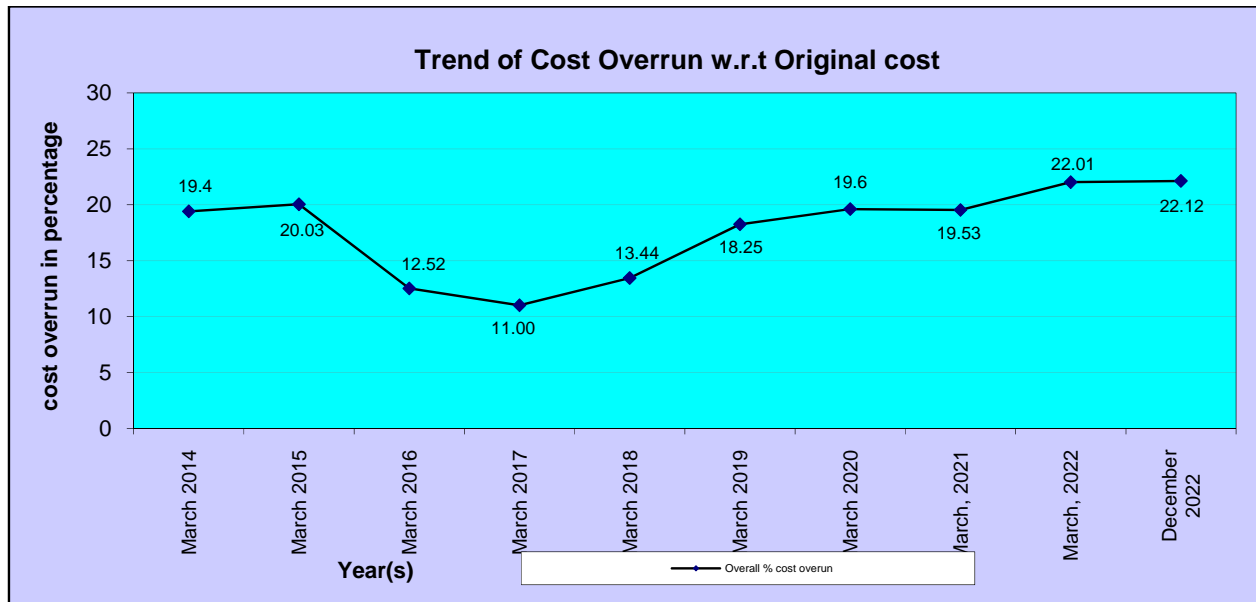
In order to reduce the delays and cost overruns in the projects, the Government has taken several steps which inter-alia includes:

- rigorous project appraisal;
- On-line Computerised Monitoring System (OCMS) for better monitoring;
- setting up of Revised Cost Committees in the Ministries for fixation of responsibility for time and cost overruns;
- regular review of the infrastructure projects by the concerned administrative Ministries;
- Setting up of Central Sector Projects Coordination Committees (CSPCCs) in the States under the Chief Secretaries for removal of bottlenecks and for facilitating the speedy implementation of major projects.
- Project review under PRAGATI.

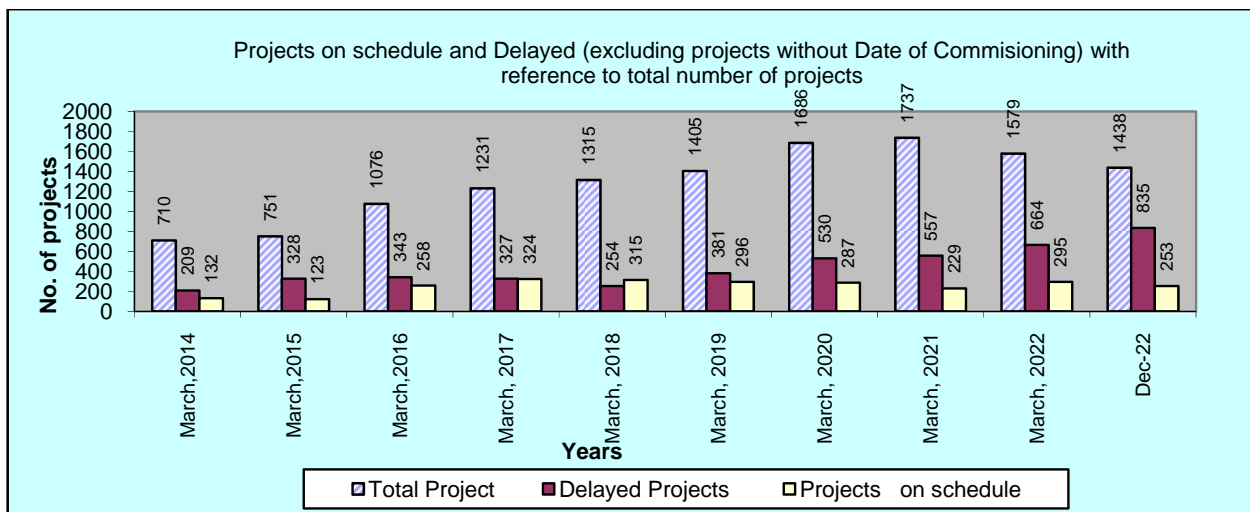
## Trend of Cost/Time Overrun:

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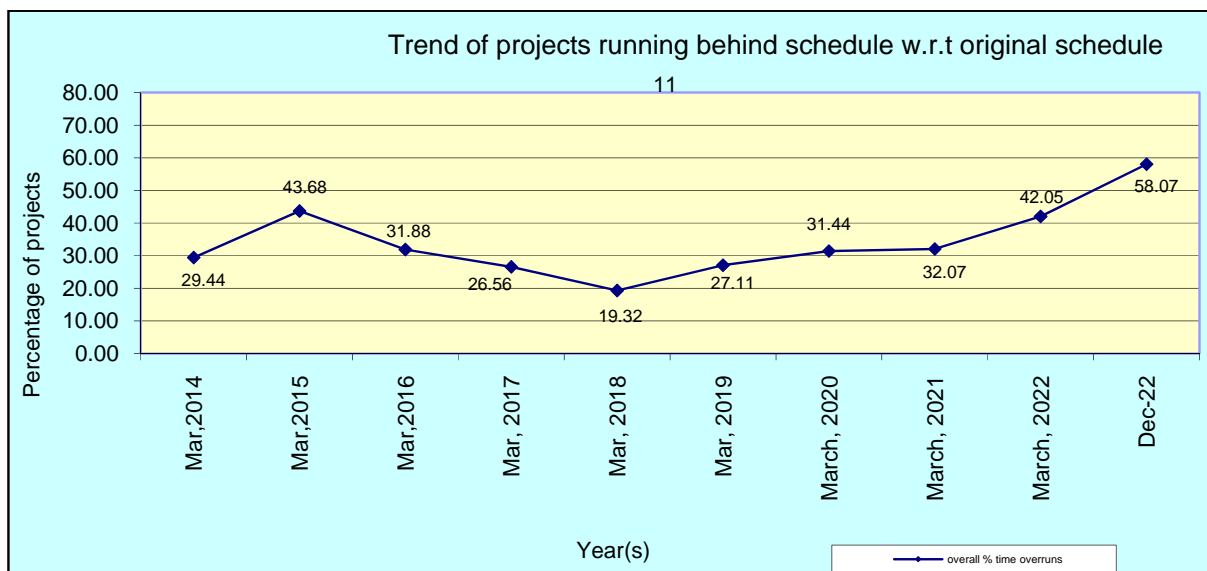
An analysis of percentage of cost overrun over the years with respect to the originally approved costs shows that the cost overruns has changed from 19.4% in March 2014 to 22.12% in December 2022. The trend of cost overrun w.r.t original cost over the years may be seen in the following graph:



The following graph shows a comparison between number of delayed projects & number of projects on schedule during last few years



An analysis of percentage of projects with Time overrun over the years with respect to the original schedule shows percentage of projects with time overrun has changed from 29.44% in March, 2014 to 58.07% December, 2022. The trend of percentage of projects with time overrun over the years may be seen in the following graph:



### Projects completed during Previous years

Financial Year	No. of completed Projects	Completion Cost (Rs. in crore)
2014-15	72	1,25,183.75
2015-16	61	1,39,256.40
2016-17	96	63,236.17
2017-18	90	1,37,763.91
2018-19	132	1,28,588.55
2019-20	186	1,30,229.00
2020-21	77	55,615.13
2021-22	272	2,65,168.07
2022-23 (uptoDecember 2022)	229	230902.31
<b>Total</b>	<b>1215</b>	<b>12,75,943.29</b>

### Focussed attention on 53Delayed Projects

Analysis of projects showing substantial time and cost overrun depicts that following 53projects having Cost overrun of 50% & more and Time overrun of 50 months and more, contribute nearly 39%\* of the total cost overrun and 18%\$ of total time overrun. These projects are required to be taken up for special monitoring by the respective administrative ministries.

### Sector-wise List of Projects Requiring Focussed Attention

(All cost in Rs. crore)

S. NO	PROJECT NAME	SECTOR NAME	DOC ORIGIN AL	DOC ANTICIPATED	COST ORIGIN AL	COST ANTICIPATED	COR%	TO R (in months)
1	PROTOTYPE FAST BREEDER REACTOR (BHAVINI, 500 MWE)	ATOMIC ENERGY	09/2010	12/2024	3,492	7,670	120	171
2	PARBATI HEP (4X200 MW) (NHPC) II	POWER	09/2009	12/2023	3,920	11,135	184	171
3	SUBANSIRI LOWER H.E.P (8X250 MW) (NHPC)	POWER	09/2010	06/2024	6,285	19,992	218	165
4	BARH STPP(3X660MW) NTPC	POWER	10/2011	03/2024	8,693	21,312	145	149
5	UDHAMPUR-SRINAGAR-BARAMULLA (NL),NR	RAILWAYS	11/2002	06/2023	2,500	37,012	1,380	247
6	BELAPUR-SEAWOOD-URAN ELECTRIFIED DOUBLE LINE(MTP)	RAILWAYS	03/2004	03/2023	495	2,980	502	228
7	NANGALDAM-TALWARA(NL),NR	RAILWAYS	07/2012	11/2024	450	2,018	348	148
8	MUNEERABAD-MAHABOBNAGAR(NL),SCR	RAILWAYS	03/2000	03/2023	1,723	3,382	96	276
9	LALITPUR-SATNA-REWA-SINGRULI NL, (NCR)	RAILWAYS	05/2008	03/2025	248	8,249	3,231	202
10	JAYANAGAR-DARBHANGA-NARKATIA GANJ(GC),ECR	RAILWAYS	03/2012	06/2023	325	1,110	242	135
11	KOTLPALLI-NARASAPUR (NL) (SCR)	RAILWAYS	03/2009	03/2027	1,045	2,501	139	216
12	JIRIBAM TO IMPHAL (TUPUI)(NL)(NEFR)	RAILWAYS	03/2011	03/2025	4,454	14,323	222	168
13	SUKINDA ROAD - ANGUL (NL)(ECOR)	RAILWAYS	02/2015	03/2023	1,203	2,441	103	97
14	KHURDA ROAD - BARANG 3RD LINE (DL) (ECOR)	RAILWAYS	03/2009	01/2023	133	433	225	166
15	KAKRAPAR ATOMIC POWER PROJECT - 3 AND 4	ATOMIC ENERGY	12/2015	06/2023	11,459	19,220	68	90
16	CONSTRUCTION OF NEW INTEGRATED TERMINAL BUILDING AT VSI AIRPORT, PORTBLAIR	CIVIL AVIATION	09/2018	04/2023	417	708	70	55
17	NEYVELI NEW THERMAL POWER PROJECT(2X500 MW)	COAL	12/2015	02/2021	5,907	8,990	52	62
18	RANIGANJ MASTER PLAN	COAL	08/2019	08/2024	2,662	5,146	93	60
19	CONVERSION OF RIG SAGAR SAMRAT TO MOBILE	PETROLEUM	05/2013	12/2022	862	2,001	132	115

	OFFSHORE PRODUCTION UNIT(MOPS)		13					
20	LPG TERMINAL AT KOCHI	PETROLEUM	10/2017	12/2022	607	1,236	104	62
21	IRUGUR-DEVANGONTHI POL PIPELINE	PETROLEUM	02/2017	01/2026	678	1,732	155	107
22	KOCHI-KOOTTANAD-BANGALORE-MANGALORE PIPELINE PHASE-II	PETROLEUM	12/2012	02/2025	2,915	5,909	103	146
23	TEHRI PUMPED STORAGE PLANT(1000MW)	POWER	02/2016	10/2023	1,657	4,826	191	92
24	TAPOVAN-VISHNUGAD HEP (4X130MW)	POWER	03/2013	12/2024	2,978	7,103	138	141
25	VISHNUGAD PIPALKOTI HYDRO ELECTRIC PROJECT	POWER	06/2013	03/2025	2,492	3,860	55	141
26	COMPREHENSIVE SCHEME FOR THE STRENGTHENING OF THE TRANSMISSION AND DISTRIBUTION SYSTEM IN A P	POWER	12/2018	03/2024	4,754	9,129	92	63
27	MANOHARABAD-KOTHPALL NEW LINE(SCR)	RAILWAYS	03/2010	03/2025	1,160	2,250	94	180
28	MAYLADUTHURAI-THIRUVARUR-KARAIKUDI-THIRU 'PONDU'-AGASTIYAMPALLI	RAILWAYS	02/2019	03/2025	725	3,118	330	73
29	NEW B.G. LINE FROM TETELIA TO BYRNIHAT (NATIONAL PROJECT), NEFR	RAILWAYS	03/2019	03/2024	385	1,305	239	60
30	NEW B.G. LINE FROM ARARIA TO GALGALIA (THAKURGUNG), NEFR	RAILWAYS	03/2019	12/2023	533	2,650	397	57
31	BHAIRABI SAIRONG, NL, NEFR	RAILWAYS	03/2014	12/2023	2,393	6,527	173	117
32	SEVOK RANGPO, NEFR	RAILWAYS	12/2015	12/2023	1,339	7,877	488	96
33	NEW WORK FOR CONSTRUCTION OF METRO RAILWAY FROM NSCB AIRPORT TO NEW GARIA VIA RAJARHAT (MTP)	RAILWAYS	03/2016	03/2026	3,952	8,964	127	120
34	NEW WORK FOR CONSTRUCTION OF METRO RAILWAY FROM JOKA TO BINOY BADAL DINESH BAGH.	RAILWAYS	03/2016	07/2025	2,914	4,835	66	112
35	BHUJ-NALIYA(GC) WITH EXTENSION FROM NALIYA TO VAYOR (WR)	RAILWAYS	03/2012	03/2024	318	1,086	241	144

36	NEW LINE FROM DIMAPUR TO ZUBZA(KOHIMA) NATIONAL PROJECT (NEFR)	RAILWAYS	14/03/2015	03/2026	2,327	6,663	186	132
37	CHHAPRA-BALLIA UP	RAILWAYS	01/2019	07/2023	295	800	171	54
38	MURKONGSELEK-PASIGHAT NL	RAILWAYS	03/2020	10/2024	415	984	137	55
39	MULTI MODAL TRANSPORT SYSTEM(MMTS) PHASE-II HYDERABAD	RAILWAYS	03/2016	03/2023	633	950	50	84
40	MADURAI-TUTICORIN VIA ARUPPUKKOTTAI	RAILWAYS	03/2019	12/2027	121	2,053	1,601	105
41	BAGALKOT-KUDACHI NL	RAILWAYS	03/2016	12/2026	986	1,530	55	129
42	LUCKNOW- PILIBHIT VIA SITAPUR, LAKHIMPUR GC	RAILWAYS	03/2019	12/2023	927	1,458	57	57
43	NANPARA - NEPALGANJ GAUGE CONVERSION.	RAILWAYS	04/2017	12/2025	150	342	128	104
44	REHABILITATION AND UPGRADATION OF EXISTING NH-565 FROM KM.86.057 TO 133.922 OF NAGARJUNASAGAR DAM T	ROAD TRANSPORT AND HIGHWAYS	11/2014	05/2022	195	386	97	90
45	FOUR LANING OF NUMALIGARH TO JORHAT SECTION FROM KM. 402.500 TO KM. 453.000 (DESIGN KM 403.200 TO KM	ROAD TRANSPORT AND HIGHWAYS	05/2018	12/2022	455	815	79	55
46	4-LANING OF GOA/KARNATAKA BORDER-KUNDAPUR SECTION	ROAD TRANSPORT AND HIGHWAYS	08/2016	03/2023	1,655	2,639	59	79
47	FOUR LANING OF PARWANOO -SOLAN	ROAD TRANSPORT AND HIGHWAYS	03/2018	03/2023	934	1,578	69	60
48	FOUR LANING OF SULTANPUR TO VARANASI (PKG-I)	ROAD TRANSPORT AND HIGHWAYS	06/2018	03/2023	1,028	2,628	156	57
49	FOUR LANING OF GHAGHRA BRIDGE TO VARANASI (PKG-II)	ROAD TRANSPORT AND HIGHWAYS	06/2018	02/2023	667	3,007	351	56
50	FOUR LANNING OF RAMPUR- KATHGODAM SECTION OF NH-87 FROM	ROAD TRANSPORT AND	04/2019	06/2023	899	1,377	53	50

	KM 0.000 (KM. 190.000 OF NH-24) TO KM 42.791	HIGHWAYS	15					
51	FOUR LANING OF GAYA-HISUA-RAJGIRI-NALANDA-BIHARSHARIF SECTION (KM0.00 TO 92.935) ON NH-82 IN BIHAR	ROAD TRANSPORT AND HIGHWAYS	10/2016	11/2023	1,409	2,138	52	85
52	4 LANING OF KASHIPUR-SITARGANJ SECTION KM. 175.000 TO KM. 252.20	ROAD TRANSPORT AND HIGHWAYS	07/2018	03/2023	606	1,023	69	56
53	WIDENING TO TWO LANE WITH PAVED SHOULDER FROM KM 544.200 TO KM 594.000 OF NH-150A HOSMANE CROSS ? PA	ROAD TRANSPORT AND HIGHWAYS	09/2017	03/2023	167	264	59	66

DOC = DATE OF COMMISSIONING

COR = COST OVERRUN

TOR = TIME OVERRUN

$\frac{\text{*(Total cost overrun in projects having cost overrun of 50\% and more)} \times 100}{\text{Total cost overrun in all projects}}$

$\frac{\text{\$ (Total time overrun (in months) in projects having time overrun of 50 months and more)} \times 100}{\text{Total time overrun (in months) in all projects}}$