



116th PROJECT IMPLEMENTATION

AN OVERVIEW – December 2021



Government of India

Ministry of Statistics and Programme Implementation

Infrastructure and Project Monitoring Division

Room No. 605, Level 6,

Khurshid Lal Bhawan, Janpath

New Delhi-110001

Website: 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 01.01.2022, **1,673** projects with anticipated completion cost of Rs. **26,64,649.18** crore were on the monitor of the Ministry. For the purpose of monitoring, these projects have been categorised into two categories:

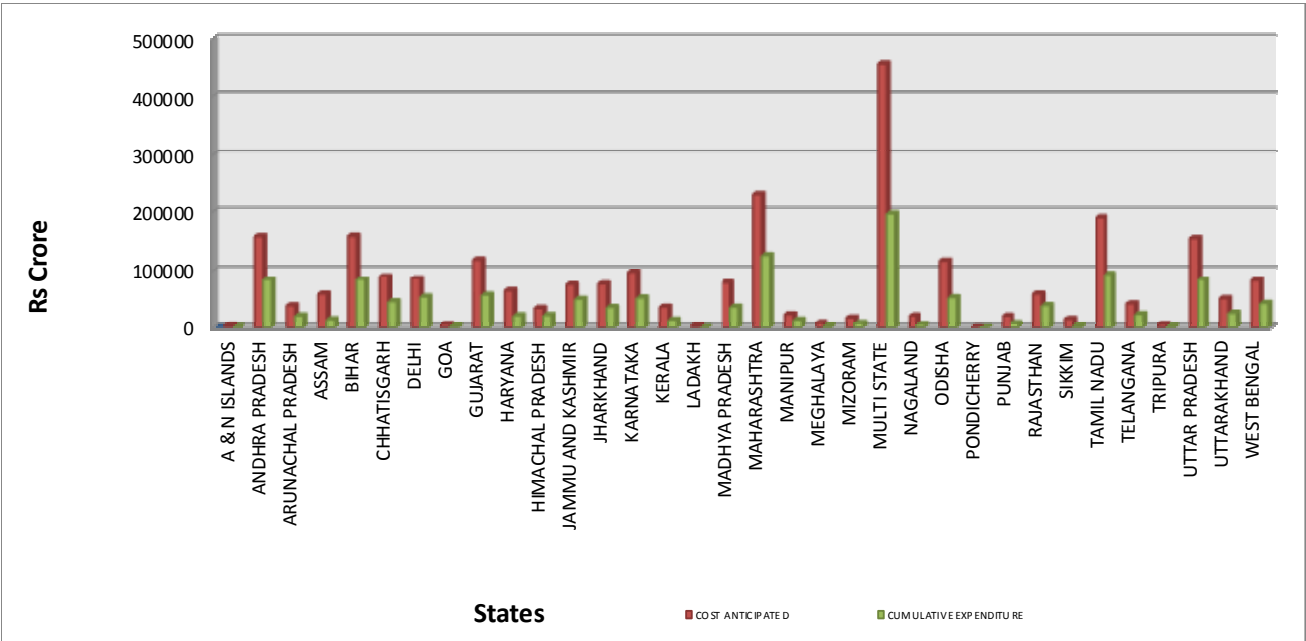
As on 1st January 2022

SN	Category	No. of Projects	Anticipated Cost (Rs. in crore)
1	Mega (Rs. 1000 crore and above)	478	21,50,675.59
2	Major (Rs. 150 crore to less than Rs. 1000 crore)	1195	5,13,973.59
	TOTAL	1,673	26,64,649.18

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:

STATE WISE STATUS OF CENTRAL SECTOR PROJECTS COSTING Rs 150 CRORE AND ABOVE					
(All Cost /Expenditure in Rs. crore)					
S.NO	STATE	NO OF PROJECTS	COST ORIGINAL	COST ANTICIPATED	CUMULATIVE EXPENDITURE
1	A & N ISLANDS	9	2,888.63	3,159.99	1,642.71
2	ANDHRA PRADESH	67	1,12,107.24	1,58,677.58	83,084.01
3	ARUNACHAL PRADESH	43	23,906.60	37,842.94	20,583.18
4	ASSAM	48	48,689.00	57,952.53	14,028.77
5	BIHAR	98	1,23,227.91	1,59,169.38	83,613.55
6	CHHATISGARH	46	78,726.75	89,025.67	45,037.76
7	DELHI	30	84,192.81	85,286.80	53,048.43
8	GOA	10	5,332.77	5,343.26	2,814.61
9	GUJARAT	59	1,08,152.96	1,19,380.3	56,253.28
10	HARYANA	36	61,492.56	63,819.18	20,834.71
11	HIMACHAL PRADESH	20	22,264.08	33,301.38	21,353.35
12	JAMMU AND KASHMIR	30	48,180.49	74,107.74	49,072.88
13	JHARKHAND	41	69,363.87	75,272.33	35,295.28
14	KARNATAKA	56	85,354.49	97,051.69	51,190.08
15	KERALA	22	30,240.60	35,398.30	12,969.15
16	LADAKH	8	2,633.23	2,767.29	293.41
17	MADHYA PRADESH	78	68,627.95	77,288.11	35,592.61
18	MAHARASHTRA	229	2,06,831.47	2,29,792	1,26,950.31
19	MANIPUR	26	12,108.58	22,615.20	13,077.89
20	MEGHALAYA	13	5,269.68	8,391.62	2,723.47
21	MIZORAM	24	11,957.35	16,911.60	7,888.67
22	MULTI STATE	113	3,46,034.59	4,57,844.63	1,96,589.21
23	NAGALAND	35	15,989.03	20,373.15	5,277.32
24	ODISHA	78	1,09,287.57	1,17,479.3	51,740.77
25	PONDICHERRY	1	195.00	195.00	16.41
26	PUNJAB	28	18,344.99	20,091.84	7,485.46
27	RAJASTHAN	55	51,403.28	58,096.28	38,279.46
28	SIKKIM	18	7,278.84	14,598.73	2,967.68
29	TAMIL NADU	68	1,70,613.2	1,90,104.32	93,475.16
30	TELANGANA	51	38,003.46	41,083.48	22,934.90
31	TRIPURA	19	5,084.45	5,259.05	2,173.32
32	UTTAR PRADESH	113	1,51,519.42	1,55,425.03	83,281.84
33	UTTARAKHAND	30	35,588.83	50,291.17	25,170.86
34	WEST BENGAL	71	62,900.10	81,252.31	42,026.15
Total		1,673	22,23,791.78	26,64,649.18	13,08,766.65

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

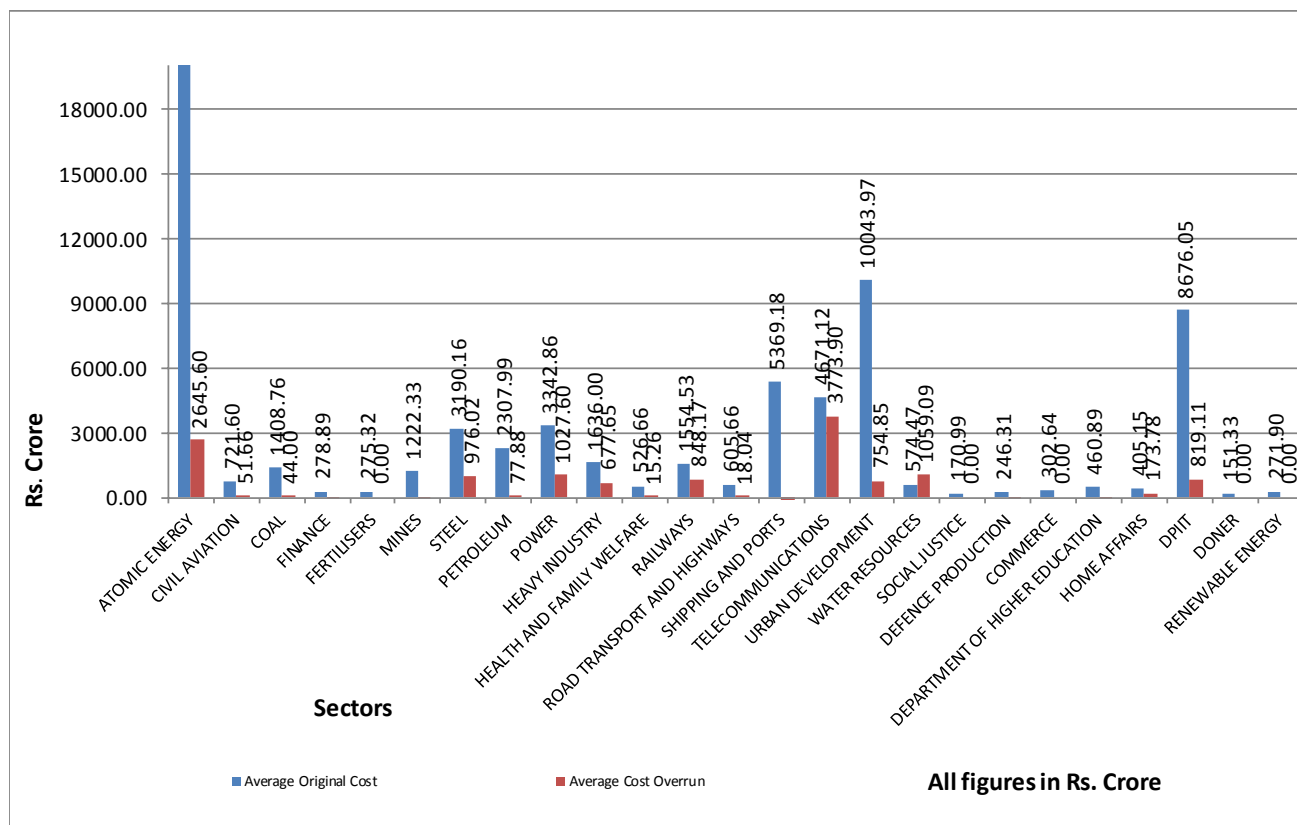


Sector-Wise analysis of Cost Overrun in projects

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	116,741.00	116,741.00	129,969.00	13228	13228
2	CIVIL AVIATION	20	14,431.97	15,324.88	15,465.25	1033.28	140.37
3	COAL	106	149,328.98	151,749.92	153,992.98	4664	2243.06
4	FINANCE	2	557.77	557.77	557.73	-0.04	-0.04
5	FERTILISERS	4	1,101.28	1,101.28	1,101.28	0	0
6	MINES	6	7,333.99	8,226.44	7,330.54	-3.45	-895.9
7	STEEL	7	22,331.15	28,746.15	29,163.30	6832.15	417.15
8	PETROLEUM	147	339,274.49	362,601.27	350,723.52	11449.03	-11877.75
9	POWER	62	207,257.24	267,295.21	270,968.33	63711.09	3673.12
10	HEAVY INDUSTRY	2	3,272.00	5,281.30	4,627.30	1355.3	-654
11	HEALTH AND FAMILY WELFARE	29	15,273.26	15,273.26	15,715.78	442.52	442.52
12	RAILWAYS	285	443,040.10	556,878.65	684,768.60	241728.5	127889.95
13	ROAD TRANSPORT AND HIGHWAYS	888	537,828.12	545,726.59	553,848.05	16019.93	8121.46
14	SHIPPING AND PORTS	1	5,369.18	4,633.81	4,633.81	-735.37	0
15	TELECOMMUNICATIONS	3	14,013.36	25,335.07	25,335.07	11321.71	0
16	URBAN DEVELOPMENT	29	291,275.10	300,321.90	313,165.63	21890.53	12843.73
17	WATER RESOURCES	43	24,702.19	70,134.44	70,243.27	45541.08	108.83
18	SOCIAL JUSTICE	1	170.99	170.99	170.99	0	0
19	DEFENCE PRODUCTION	1	246.31	210	210	-36.31	0
20	COMMERCE	1	302.64	302.64	302.64	0	0
21	DEPARTMENT OF HIGHER EDUCATION	22	10,139.61	10,170.00	10,047.96	-91.65	-122.04
22	HOME AFFAIRS	5	2,025.73	2,113.83	2,894.62	868.89	780.79
23	DPIIT	2	17,352.09	17,352.09	18,990.30	1638.21	1638.21
24	DONER	1	151.33	151.33	151.33	0	0
25	RENEWABLE ENERGY	1	271.9	271.9	271.9	0	0
		1673	2,223,791.78	2,506,671.72	2,664,649.18	440,857.40	157,977.46

Average original cost & cost overrun in different Sectors



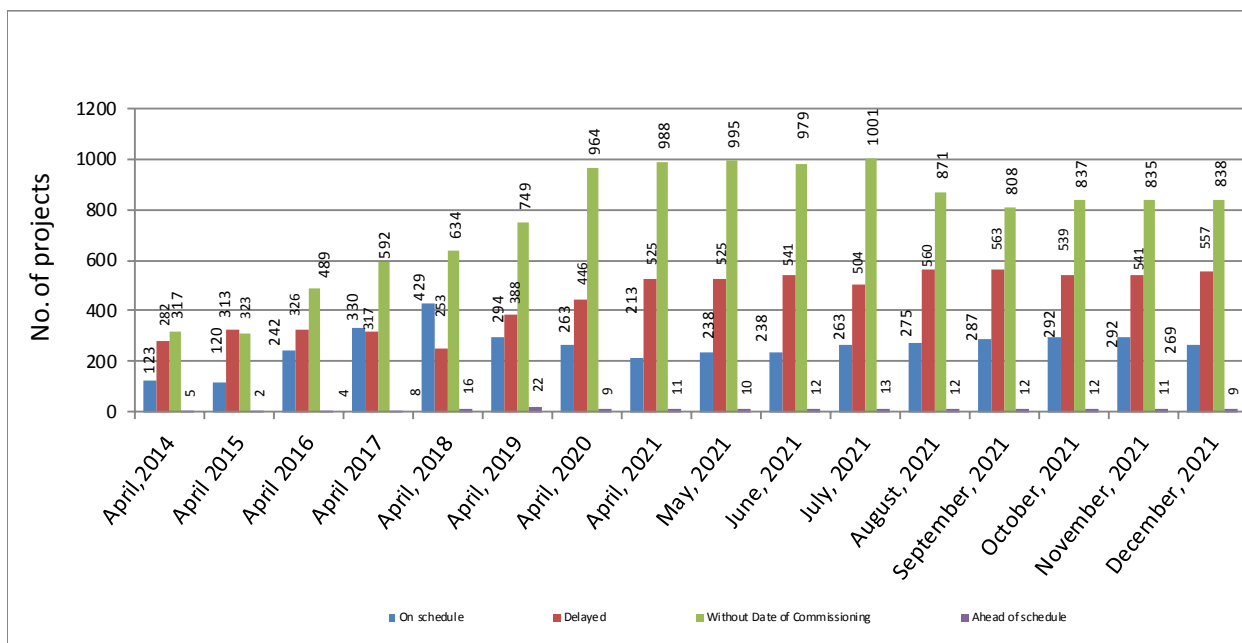
Current Scenario of Projects

- Total 1673 projects are on the monitor of this Ministry
- 9 Projects are ahead of schedule
- 269 Projects are on schedule
- 557 Projects are delayed
- 445 Projects have cost overruns.
- 838 Projects have been reported with inadequate information about commissioning schedule.

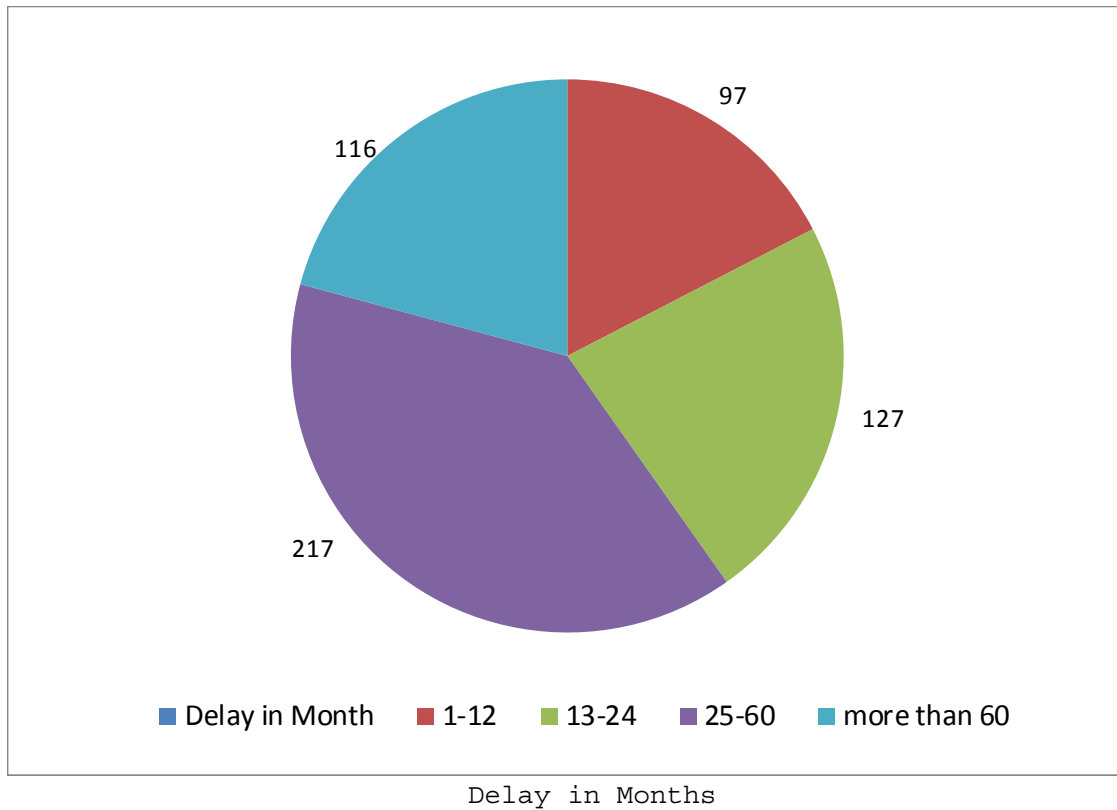
Highlights of the on-going projects (as on 01.01.2022)

Total number of projects on the monitor	1673
Total Original cost of 1673 projects	Rs 22,23,791.78crore
Total anticipated cost of these projects	Rs 26,64,649.18crore
Cumulative Expenditure till March 2021	Rs. 11,19,383.26crore
Expenditure during current month (December 2021)	Rs. 24,114.15crore
Expenditure during current financial year upto December2021)	Rs.1,89,383.39crore
Cumulative Expenditure till December 2021	Rs. 13,08,766.65crore
Overall percentage cost overrun with respect to original estimates	19.82%
Overall percentage cost overrun with respect to latest sanctioned estimates	6.30%
Total number of projects showing cost overrun w.r.t original approved cost	445
Total number of projects showing time overrun w.r.t original Schedule	557 (Ranging from 2 to 324 months)
Percentage cost overrun in 557delayed Projects	33.54%
No. of projects completed during the month	8

Trend in Projects during Previous Years



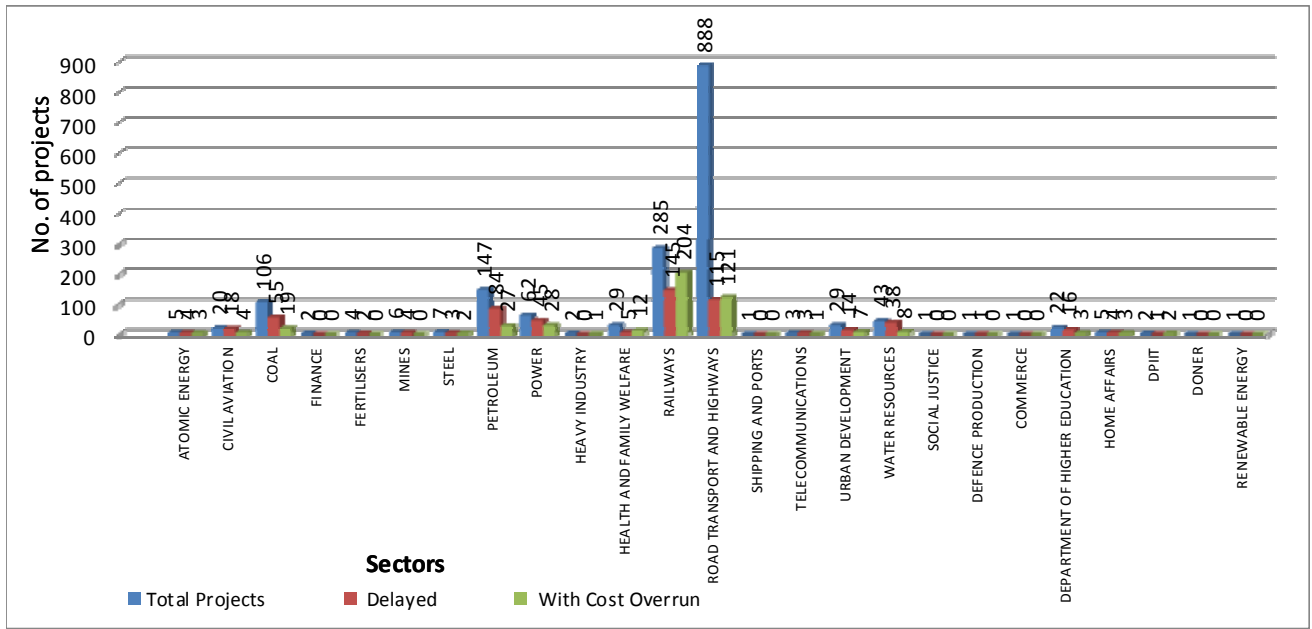
Break-up of 557 delayed (in months) projects in December 2021



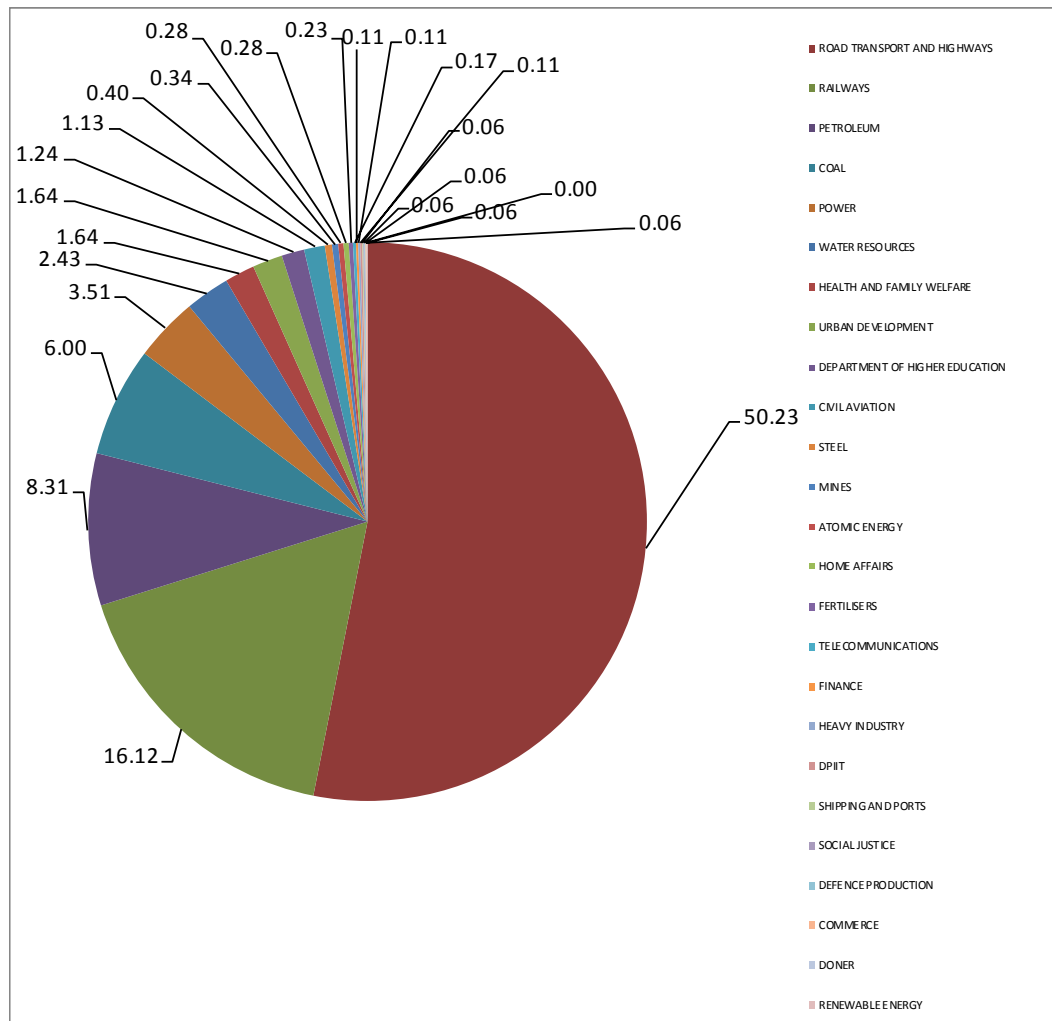
Status of Projects Showing Cost and Time Overrun

Status of Projects (as on 01.01.2022)						
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	3
2	CIVIL AVIATION	20	18	15	4	2
3	COAL	106	55	40	19	8
4	FINANCE	2	0	0	0	0
5	FERTILISERS	4	2	1	0	0
6	MINES	6	4	1	0	0
7	STEEL	7	3	3	2	1
8	PETROLEUM	147	84	52	27	2
9	POWER	62	45	28	28	12
10	HEAVY INDUSTRY	2	0	0	1	0
11	HEALTH AND FAMILY WELFARE	29	5	5	12	12
12	RAILWAYS	285	145	116	204	173
13	ROAD TRANSPORT AND HIGHWAYS	888	115	97	121	144
14	SHIPPING AND PORTS	1	0	0	0	0
15	TELECOMMUNICATIONS	3	3	3	1	0
16	URBAN DEVELOPMENT	29	14	4	7	3
17	WATER RESOURCES	43	38	38	8	4
18	SOCIAL JUSTICE	1	0	0	0	0
19	DEFENCE PRODUCTION	1	1	1	0	0
20	COMMERCE	1	0	0	0	0
21	DEPARTMENT OF HIGHER EDUCATION	22	16	11	3	3
22	HOME AFFAIRS	5	4	1	3	1
23	DPIIT	2	1	0	2	2
24	DONER	1	0	0	0	0
25	RENEWABLE ENERGY	1	0	0	0	0
Total		1673	557	420	445	370

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



Sectoral break up of on-going infrastructure projects



Reasons for Time Overrun

- 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

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

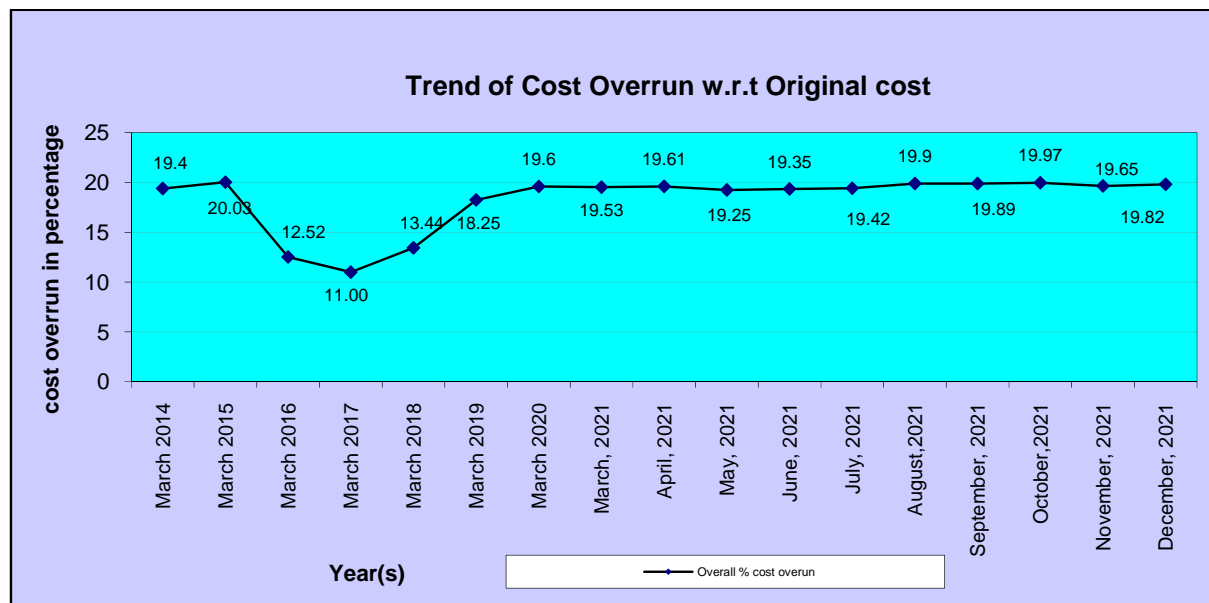
Action taken by the Government to Minimise Time and cost overruns in Projects

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

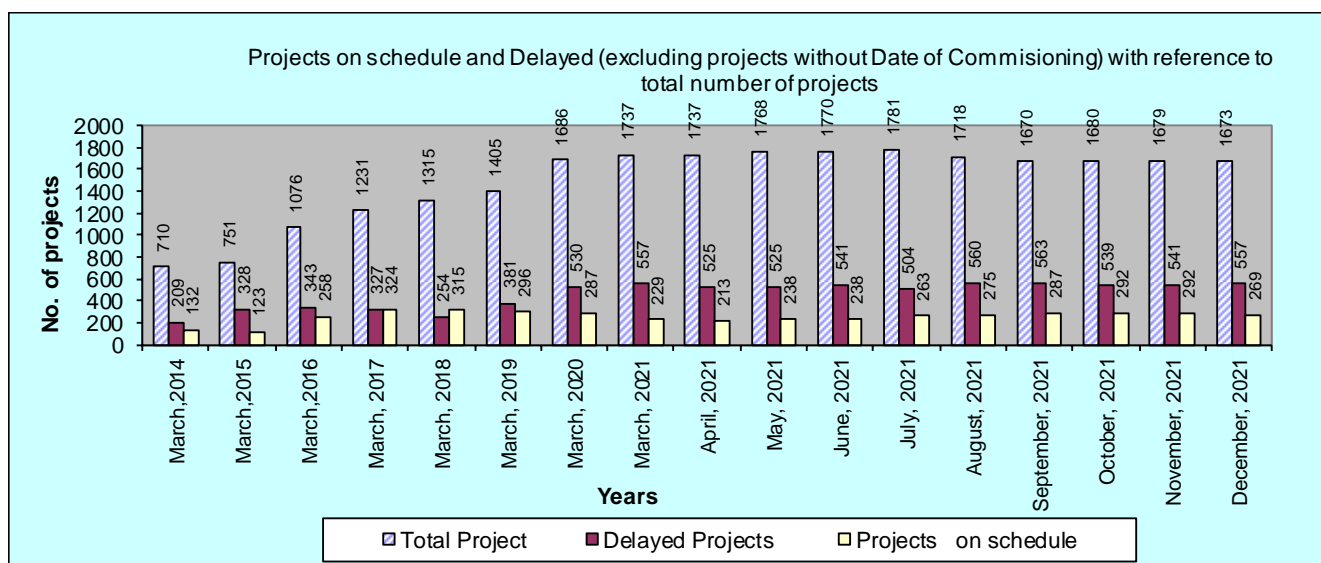
- rigorous project appraisal;
- On-line Computerised Monitoring System (OCMS) for better monitoring;
- setting up of Revised Cost Committees in the Ministries for fixation of responsibility for time and cost overruns;
- regular review of the infrastructure projects by the concerned administrative Ministries;
- 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:

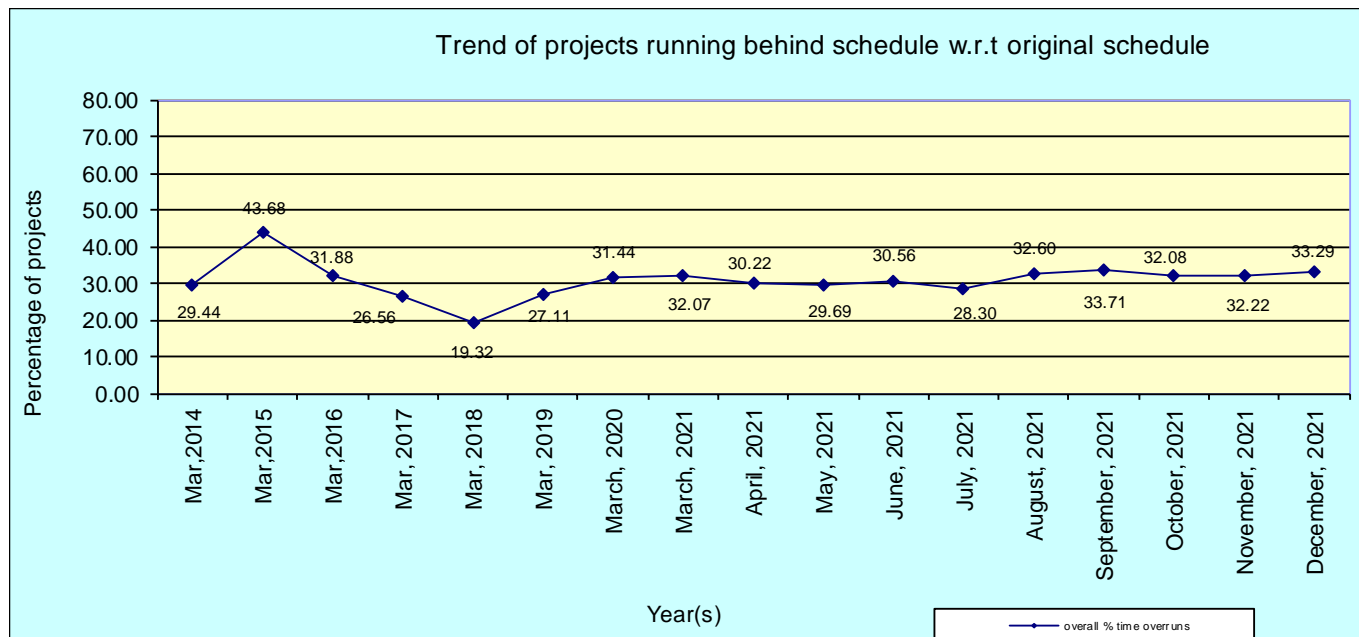
An analysis of percentage of cost overrun over the years with respect to the originally approved costs shows that the cost overruns has changed from 19.4% in March 2014 to 19.82% in December 2021. The trend of cost overrun w.r.t original cost over the years may be seen in the following graph:



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 33.29% December, 2021. 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 (upto December 2021)	178	1,81,924.70
Total	892	9,61,797.61

Focussed attention on 44 Delayed Projects

Analysis of projects showing substantial time and cost overrun depicts that following 44 projects having Cost overrun of 50% & more and Time overrun of 50 months and more, contribute nearly 38%* of the total cost overrun and 22%* 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 ANTICI PATED	COST ORIGIN AL	COST ANTICI PATED	COR%	TOR (in mont hs)
1	LPG TERMINAL AT KOCHI	PETROLEUM	10/2017	09/2022	607.06	1236.00	104	59
2	NEW B.G. LINE FROM ARARIA TO GALGALIA (THAKURGUNG), NEFR	RAILWAYS	03/2019	03/2024	532.87	2145.00	303	60
3	RANIGANJ MASTER PLAN	COAL	08/2019	08/2024	2661.73	5146.48	93	60
4	TIRUCHIRAPPALI-NAGORE-KARAIKKAL(SR)(GC)	RAILWAYS	03/2020	03/2025	303.98	1549.09	410	60
5	COMPREHENSIVE SCHEME FOR THE STRENGTHENING OF THE TRANSMISSION AND DISTRIBUTION SYSTEM IN A P	POWER	12/2018	03/2024	4754.42	9129.32	92	63
6	IRUGUR-DEVANGONTHI POL PIPELINE	PETROLEUM	02/2017	08/2022	678.00	1472.00	117	66
7	NANPARA - NEPALGANJ GAUGE CONVERSION.	RAILWAYS	04/2017	10/2022	150.00	341.66	128	66
8	MULTI MODAL TRANSPORT SYSTEM(MMTS) PHASE-II HYDERABAD	RAILWAYS	03/2016	12/2021	632.68	950.00	50	69
9	MAYLADUTHURAI-THIRUVARUR-KARAIKUDI-THIRU 'PONDI'-AGASTIYAMPALLI	RAILWAYS	02/2019	03/2025	724.69	3081.20	325	73
10	NETWORK FOR SPECTRUM	TELECOMMUN ICATIONS	07/2015	03/2022	13334.00	24664.00	85	80
11	RCE OF INDARAM OCP(1.20 MTPA)	COAL	03/2015	03/2022	162.76	349.28	115	84
12	JAGANNATHPOR OCP(3.00MTY)	COAL	03/2015	03/2022	152.43	459.49	201	84
13	SUKINDA ROAD - ANGUL (NL)(ECOR)	RAILWAYS	02/2015	06/2022	1202.70	2440.53	103	88

14	TEHRI PUMPED STORAGE PLANT(1000MW)	POWER	02/2016	06/2023	1657.00	4825.60	191	88
15	SEVOK RANGPO, NEFR	RAILWAYS	12/2015	12/2023	1339.48	8600.00	542	96
16	MADURAI-TUTICORIN VIA ARUPPUKKOTTAI	RAILWAYS	03/2019	12/2027	120.70	2172.16	1700	105
17	CONVERSION OF RIG SAGAR SAMRAT TO MOBILE OFFSHORE PRODUCTION UNIT(MOPS)	PETROLEUM	05/2013	05/2022	861.79	2001.34	132	108
18	NEW WORK FOR CONSTRUCTION OF METRO RAILWAY FROM JOKA TO BINOY BADAL DINESH BAGH.	RAILWAYS	03/2016	03/2025	2913.51	4639.00	59	108
19	EXTENSION OF MRTS FROM VELACHERY TO STN. THOMAS, MTP	RAILWAYS	06/2013	07/2022	495.74	774.51	56	109
20	BHAIRABI SAIRONG, NL, NEFR	RAILWAYS	03/2014	12/2023	2393.47	6527.00	173	117
21	DIGHA-JALESWAR INCLUDING MM FOR DIGHA-EGRA	RAILWAYS	03/2015	03/2025	651.00	1009.00	55	120
22	JAYANAGAR-DARBHANGA-NARKATIA GANJ(GC),ECR	RAILWAYS	03/2012	11/2022	324.73	1080.00	233	128
23	BAGALKOT-KUDACHI NL	RAILWAYS	03/2016	12/2026	986.30	1530.09	55	129
24	HINGULA OC-II EXP. PH-III (15 MTY)	COAL	03/2013	03/2024	479.53	808.97	69	132
25	NEW LINE FROM DIMAPUR TO ZUBZA(KOHIMA) NATIONAL PROJECT (NEFR)	RAILWAYS	03/2015	03/2026	2326.52	6663.00	186	132
26	DEOGHAR - SULTANGANJ (INL), ER	RAILWAYS	02/2013	03/2024	607.09	1425.44	135	133
27	ATTIPPATTU PUTTUR	RAILWAYS	02/2019	03/2030	151.84	527.37	247	133
28	TAPOVAN-VISHNUGAD HEP (4X130MW)	POWER	03/2013	09/2024	2978.48	5867.38	97	138
29	VISHNUGAD PIPALKOTI HYDRO ELECTRIC PROJECT	POWER	06/2013	12/2024	2491.58	3860.35	55	138
30	KOCHI-KOOTTANAD-BANGALORE-MANGALORE PIPELINE PHASE-II	PETROLEUM	12/2012	08/2024	2915.00	5909.00	103	140
31	BARH STPP(3X660MW) NTPC	POWER	10/2011	07/2023	8692.97	21312.11	145	141
32	PROTOTYPE FAST BREEDER REACTOR	ATOMIC	09/2010	10/2022	3492.00	6840.00	96	145

	(BHAVINI, 500 MWE)	ENERGY						
33	NANGALDAM-TALWARA(NL),NR	RAILWAYS	07/2012	11/2024	450.00	2017.96	348	148
34	JIRIBAM TO IMPHAL (TUPUI)(NL)(NEFR)	RAILWAYS	03/2011	12/2023	4454.17	14322.00	222	153
35	SUBANSIRI LOWER H.E.P (8X250 MW) (NHPC)	POWER	09/2010	08/2023	6285.33	19992.43	218	155
36	NEW MAYNAGURI TO JOGIGHOPA VIA CHANGRABANDHA (NL),NEFR	RAILWAYS	12/2008	12/2021	1180.19	4541.38	285	156
37	PARBATI HEP (4X200 MW) (NHPC) II	POWER	09/2009	03/2023	3919.59	9897.59	153	162
38	KOTLPALLI-NARASAPUR (NL) (SCR)	RAILWAYS	03/2009	03/2024	1045.20	2120.16	103	180
39	THIRUMAILA - VELACHERY : MASS RAPID TRANSIT SYSTEM (PHASE II)	RAILWAYS	03/2005	12/2021	268.87	991.83	269	201
40	LALITPUR-SATNA-REWA-SINGRULI NL, (NCR)	RAILWAYS	05/2008	03/2025	247.66	8248.50	3231	202
41	BELAPUR-SEAWOOD-URAN ELECTRIFIED DOUBLE LINE(MTP)	RAILWAYS	03/2004	06/2022	495.44	2980.41	502	219
42	UDHAMPUR-SRINAGAR-BARAMULLA (NL),NR	RAILWAYS	11/2002	12/2022	2500.00	27949.00	1018	241
43	MUNEERABAD-MAHABOBNAGAR(NL),SC R	RAILWAYS	03/2000	03/2023	1723.00	3421.35	99	276
44	BANKURA DAMODAR VALLEY RLY LINE 96 KM GC WITH 6MMS FOR NL	RAILWAYS	03/2003	03/2030	1027.40	2373.00	131	324

DOC = DATE OF COMMISSIONING

COR = COST OVERRUN

TOR = TIME OVERRUN

*(Total cost overrun in projects having cost overrun of 50% and more) X 100
Total cost overrun in all projects

\$ (Total time overrun (in months) in projects having time overrun of 50 months and more) X 100
Total time overrun (in months) in all projects