

Appendix

Partly raw data of constructed indicators.

		GDP per capita (yuan)	Per capita fiscal expenditure (yuan)	Per capita disposable income (Yuan)	Proportion of government expenditure on medical and health care (%)	Population density (people/km <sup>2</sup> )	Proportion of permanent urban population aged 65 and above and 14 and below in total permanent urban population (%)	Number of beds in hospitals and health centers per 1,000 people (units)	Annual precipitation (mm)	Average annual temperature (°C)	Annual surface runoff (billion cubic meters)	Crop sown area (thousand hectares)	Green area coverage (%)	Water conservancy project evaluation grade (Grade)	Year-end storage capacity of large and medium-sized urban reservoirs (100 million cubic meters)	Density of drainage network in built-up area (km/sq.km)	Per capita road area (square meters)	Number of national comprehensive disaster reduction demonstration communities (units)	Number of water conservancy and environmental management personnel per 10,000 population	Total number of statutory active public information published online by the Water Resources Bureau (pieces)
Harbin	2022	58436	11341.13	43981	10.56%	184.7	25.10839	9.103115	552.6	5.2	98.97	1492.9	33.1	B	129.66	7.24696	16.7	0	18.74796	87
	2021	56580	10518.45	42745	10.10%	177.7	25.10839	9.33	582.9	4.8	116.1	1484.7	33.1	B	129.66	8.047687	12.5	4	19.76823	65
	2020	54058	12253.03	39791	8.11%	186	25.1	9.17	790.5	5.4	218.2	1471.2	34.2	B	153.87	7.794926	10.3	3	19.38062	315
	2022	74399	10773.6	43240	10.07%	14095.31	26.29169	7.414676	774.2	3.3	54.63	1650.2	38.44	B	78.97	11.46	16.53	0	31.22381	421
Changchun	2021	78255	11347.89	43281	10.08%	13890.77	26.29169	6.712739	684.7	5.8	31.7	1641.1	40.22	B	78.97	10.43	15.99	7	31.22381	295
	2020	77634	11608.1	40001	8.37%	14065.56	15.09	7.604992	668.3	6.5	31.51	1633.2	36.03	D	9.501	10.09	16.08	12	30.58434	381
Dandong	2021	39401	8659.5692	34804	7.63%	150	0.39851438	13.1316001	1023.7	10.2	124.53	209.85	40	A	4.93	0.035775	5.124261151	0	12.78882894	23
	2020	35617	10633.728	32346	7.84%	151	0.39618878	8.0147933	1311.4	10.1	109.39	209.746	40	B	4.51	0.0334859	3.888193416	0	47.93054482	0
Dandong	2021	39401	8659.5692	34804	7.63%	150	0.39851438	13.16001	1023.7	10.2	124.53	209.85	40	A	4.93	0.035775	5.124261151	0	12.78882894	23
	2020	35617	10633.728	32346	7.84%	151	0.39618878	8.0147933	1311.4	10.1	109.39	209.746	40	B	4.51	0.0334859	3.888193416	0	47.93054482	0
Beijing	2022	190313	34194.70769	77415	10.39%	1331	27.2	5.78	585.4	13.4	7.4	147	49.8	A	38.06	17.633904	4.9864945	20	56.855743	4390
	2021	187526	32921.1368	75002	8.78%	1334	25.14	5.59	698.4	13.6	31.6	122	49.3	A	43.1	18.278479	4.9077036	20	53.550672	5198
	2020	164158	32522.5217	69434	8.51%	1334	25.2	5.81	527.1	13.8	8.3	102	49	A	31.4	17.164738	4.8670626	30	51.037917	5084
	2022	119200	20000	48976	6.47%	1143	31.13	4.55	589.9	13.4	11.02	44350	38.4	A	6.81	18.56	16.11	15	26.66907	1690
Tianjin	2021	113732	22800	47449	8.53%	1151	28.22	4.51	979.6	13.4	30.5	43700	38.3	A	9.03	18.54	15.44	15	26.66907	1012
	2020	101068	22700	43854	5.57%	1163	28.8	4.44	600.2	13.6	8.6	41920	37.6	A	9.12	19.09	14.91	22	26.625811	1515
Jinan	2022	128287	13017.65643	59459	11.00%	800	16.75	8.111464	906.8	15.5	23.24	623.327	41.9	A	3.74	11.78019	21.4	2	27.39177	722
	2021	122873	13846.40103	57449	8.64%	797	16.75	7.801116	1043.4	15.6	26.17	614.8	41.7	A	1.35	10.581	20.8	2	27.39177	722
	2020	110199	14005.04216	53328.6	7.66%	788	16.75	7.4796792	718.3	14.5	13.09	614.3	40.69	A	1.46	10.462189	20.66	4	28.950216	36
	2022	134581	13082.49253	45143	10.34%	507	19.25	6.2613512	955.5	13.2	63.86	444.012	44.2	A	6.37	9.97	29.6	2	26.760563	926
Yantai	2021	122818	11336.35427	42629	9.75%	509.8	19.25	6.119049	1002.7	13.6	25.43	443.852	43.7	A	4.82	7.79	29.4	2	15.32944	596
	2020	110225	11900.6011	39306	8.62%	512.36454	19.25	6.0838718	760.4	13.2	13.87	291.353	39.71	A	2.61	9.06	26.21	3	14.71831	1011
Xuzhou	2022	93731	11441.09331	42610	8.58%	767	25.23	6.9308643	801.3	16.4	22.6	1189.87	44.6	A	1.31	12.3	22.5	6	6.8689427	1849
	2021	88419	11124.72947	40842	9.11%	767	25.23	6.7785346	1204.8	16.2	52.58	1181.95	43.3	A	1.31	12.9	22.7	6	7.0407489	2681
	2020	80288	10548.19956	37532	10.21%	772	25.23	6.5390416	1067.7	16	37.43	1180.37	43.1	A	1.31	6.7	23.4	7	8.027533	2266
	2022	101169	11351.59782	41049	9.29%	10057	27.8	8.8601715	441.4	15.9	4.78	370.13	39.3	B	0.54	8.06	10.3	2	22.345483	1453
Zhengzhou	2021	100092	12750.39246	39511	7.23%	9433.51	27.6	8.6087127	1570.5	16.9	24.66	373.04	41.6	B	0.82	8.33	10.57	2	19.263074	2124
	2020	94911	13639.46117	24783	7.31%	9417	28.1	8.311252	676.7	16.5	5.27	386.62	41.5	B	0.53	7.78	9.91	5	19.167987	2400
	2022	56075	9731.556503	15370	12.15%	5351	37	7.2904051	458.3	15.9	5.03	873.06	46.3	B	0.28	8.61	22.3	2	20.082816	1015
	2021	53173	8984.728033	24573	11.83%	5351	37.6	6.9968619	1224.1	16.6	14.96	869.77	42.6	B	0.57	8.33	22.05	2	14.078675	44
Kaifeng	2020	49166	8919.047619	31868	11.79%	5342	37.8	6.6695652	589.3	16.2	6.52	870.86	45.5	B	0.23	8.28	21.56	0	15.942029	368
	2022	60739	3444.333636	33733	19.25%	2709	24.79	3.4983379	834.4	16.7	8.4	518.303	44.42	A	0.19	9.0323	29.32	2	13.748485	86
Bengbu	2021	60117	3288.08	31972.4	10.35%	2433	24.79	6.703024	948.9	16.7	14.47	634.248	43.6	A	0.14	10.430435	10.134402	2	12.242424	361
	2020	63209	3259.399	39116	10.81%	2399	24.79	6.5471211	1101.3	16.3	16.6	636.088	42.6	A	0.12	10.273128	9.8373354	2	12.966667	365
Shanghai	2022	179907	37952.162	84834	13.93%	3905	23.721494	17.36	1044.1	14.8	27.55	271.8	38.1	A	4.66262	17.95	5	25	36.696141	815
	2021	173600	33872.479	72232	7.50%	3926	23.721494	6.1	1388.2	18.1	45.59	266.8	37.73	A	4.66262	19.08	4.81	25	44.553859	634
	2020	156800	32660.04	78027	6.80%	3830	22.775194	5.8	1660.8	17.8	49.88	257.8	37.32	A	4.66262	13.92	4.76	34	26.46449	837
	2022	178781	19336	76643	9.34%	1349	26.447368	7.45	819.8	17.6	18.6	262.27	44.96	A	17.63	12.3	26.4	7	34.549356	932
Nanjing	2021	173824	19396	73593	8.27%	1639	26.447368	7.013	1267.1	17.6	28.31	260.02	44.96	A	21.34	12.51	25.78	7	30.793991	1075
	2020	159322	18866	67553	6.89%	1614	26.447368	6.753	1294.4	17.1	23.77	251.48	44.69	A	13.59	12.51	25	12	28.18884	936
Hefei	2022	125798	14326.13	48820	8.26%	5081	29.08	6.4138468	805.8	16.9	23.65	202.08	45.96	A	43.59	16.61	14.91	6	8.054429	795
	2021	121187	15547	46009	6.63%	5014	19.893276	6.2131459	1151.2	16.7	48.86	696.104	44.18	A	10.26	15.79	14.38	6	6.6872999	2164
	2020	108427	15011	41619.2	7.44%	4216	19.893276	6.3256812	1523	16.2	87.41	689.089	41.99	A	10.39	15.46	18.76	12	7.1387407	2368
	2022	121630	15622.608	51481	9.14%	1758	30.64	6.3843474	1091.3	17.9	24.31	339.548	45.84	A	0.63	13.87	25.91	2	12.046575	1329
Wuhu	2021	117526	11311.729	48668	9.02%	1759	25.01	6.45	1309.1	17.6	38.11	398.99	46.68	A	1.3	14.28	25.45	2	4.9287671	914
	2020	102964	13327.02	44588	9.18%	1794	26.396011	6.37	1888.5	17.2	60.13	225.889	41.01	A	1.28	14.08	24.41	4	4.5863014	1024
Hangzhou	2022	152588	20540.482	70281	10.36%	4392	42.2	6.550501	1501.9	18.4	126.27	247.92	40.96	A	136.06	13.92	13.81	8	29.490393	3131
	2021	150998	20829.974	67709	7.17%	4371	41.1	6.4387086	1952.1	18.8	189.11	246.26	39.74	A	145.06	13.53	12.55	8	29.490393	2419
	2020	137474	19991.977	61879	7.20%	3789	41.6	6.4649394	1664.2	18.3	216.69	282.21	43.36	A	144.2	13.54	12.42	8	28.869674	2705
	2022	90572	12527.853	58040	10.19%	1670	28.488946	5.04	1456.4	18.628571	70.51	203.53	44.01	A	4.37	12.12	15.46	5	7.6292961	1060
Taizhou	2021	87220	12534.604	55499	9.65%	1613	28.488946	4.73	2166.1	18.985714	140.47	203.71	42.61	A	8.16	12.49	24.67	5	5.2473605	106
	2020	79520	11087.79	50643	9.68%	1584	28.488946	4.77	1243	18.914286	59.45	200.34	43.89	A	4.37	10.36	24.50	3	5.9688175	185
Wenzhou	2022	83107	11754.685	73326	11.97%	2682	38.848882	4.8388263	1431.2	18.9	104.3	220.89	39.79	A	11.42	11.8	15.69	6	14.122002	71
	2021	79647	11060.81	69678	10.58%	2556	39.328364	4.6834629	2021.6	19.3	177.99	217.21	37.65	A	13.03	11.78	15.04	6	14.165798	57
	2020	71553	10714.18	63481	10.27%	2238	38.85349	4.9352039	266.9	19.2	82.27	215.48	37.85	A	9.66	10.92	16.72	5	6.861319	21
	2022	135200	15030.421	40678	6.95%	4338	27.747799	7.669424	1445.3	18.9	97.04	367.78	46.48	B	5.63	13.06	17.43	4	14.192843	108