

## Task1

Exclude cystatinc & walktime

Sample\_size = 10027

Training result with cv =10:

	MAE	MSE	RMSE	R2	RMSLE	MAPE
0	6.0400	56.0943	7.4896	0.3866	0.1248	0.1044
1	5.8499	51.1502	7.1519	0.3781	0.1198	0.1019
2	5.8059	51.8659	7.2018	0.4108	0.1195	0.0998
3	6.1792	59.6593	7.7239	0.3448	0.1282	0.1068
4	5.8817	54.4787	7.3810	0.3702	0.1231	0.1024
5	6.2398	60.7903	7.7968	0.3478	0.1292	0.1063
6	5.8193	52.7128	7.2604	0.3425	0.1215	0.1010
7	6.1878	59.4805	7.7124	0.3615	0.1276	0.1059
8	6.1407	58.0070	7.6162	0.4161	0.1249	0.1036
9	5.6704	50.8197	7.1288	0.3104	0.1179	0.0972
Mean	5.9815	55.5059	7.4463	0.3669	0.1236	0.1029
SD	0.1893	3.6141	0.2424	0.0309	0.0037	0.0029

Predict result on 2011 dataset with cystatinc & walktime excluded:

abs|pred – origin|<= 5, 66.59%,

abs|pred – origin|<=10, 92.92%.

## Task2

Sample\_size = 10027

Training result with cv =10:

	MAE	MSE	RMSE	R2	RMSLE	MAPE
0	7.3022	80.7486	8.9860	0.1170	0.1477	0.1250
1	6.9691	73.3171	8.5625	0.1085	0.1431	0.1218
2	7.3418	81.6628	9.0367	0.0723	0.1484	0.1251
3	7.4681	85.1548	9.2279	0.0648	0.1520	0.1282
4	6.7408	72.1073	8.4916	0.1664	0.1410	0.1174
5	7.4883	85.2110	9.2310	0.0858	0.1516	0.1273
6	7.1363	77.2694	8.7903	0.0362	0.1466	0.1244
7	7.5564	85.7137	9.2582	0.0799	0.1520	0.1287
8	7.8768	93.6443	9.6770	0.0573	0.1576	0.1329
9	6.6559	69.8691	8.3588	0.0519	0.1384	0.1142
Mean	7.2536	80.4698	8.9620	0.0840	0.1478	0.1245
SD	0.3614	7.0050	0.3902	0.0361	0.0055	0.0052

Predict result on 2011 dataset:

abs|pred – origin|<= 5, 55.2%,

abs|pred – origin|<=10, 85.7 %.