APPENDIX

Table 1: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 1$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	4.94±0.02	ξ=0	4.94±0.02	ξ=0	4.94±0.02
	ξ=0.01	4.98±0.01	ξ=0.5	4.95±0.01	ξ=0.5	4.94±0.04
	ξ=0.001	4.94±0.03	ξ=1	4.95±0.01	ξ=1	**4.93±0.03**
	ξ=0.0001	**4.93±0.01**	ξ=2	**4.92±0.01**	ξ=2	**4.92±0.03**
outflow	ξ=0	5.24±0.01	ξ=0	5.24±0.01	ξ=0	5.24±0.01
	ξ=0.01	5.27±0.02	ξ=0.5	5.25±0.02	ξ=0.5	5.24±0.02
	ξ=0.001	5.25±0.03	ξ=1	**5.24±0.01**	ξ=1	**5.23±0.01**
	ξ=0.0001	**5.24±0.02**	ξ=2	**5.24±0.03**	ξ=2	**5.21±0.02**

Table 2: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 1$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	23.64±0.41	ξ=0	23.64±0.41	ξ=0	23.64±0.41
	ξ=0.01	23.79±0.40	ξ=0.5	23.95±0.35	ξ=0.5	**23.26±0.29**
	ξ=0.001	23.89±0.60	ξ=1	**23.38±0.36**	ξ=1	**23.58±0.48**
	ξ=0.0001	**23.54±0.10**	ξ=2	**23.30±0.35**	ξ=2	**23.37±0.36**
outflow	ξ=0	24.22±0.21	ξ=0	24.22±0.21	ξ=0	24.22±0.21
	ξ=0.01	24.68±0.35	ξ=0.5	24.63±0.32	ξ=0.5	**24.12±0.32**
	ξ=0.001	24.64±0.47	ξ=1	24.47±0.36	ξ=1	24.22±0.43
	ξ=0.0001	24.25±0.16	ξ=2	**24.13±0.21**	ξ=2	**24.21±0.37**

Table 3: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 1$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^\xi}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	4.97±0.01	ξ=0	4.97±0.01	ξ=0	4.97±0.01
	ξ=0.01	**4.95±0.02**	ξ=0.5	**4.96±0.03**	ξ=0.5	**4.94±0.03**
	ξ=0.001	**4.93±0.01**	ξ=1	**4.96±0.01**	ξ=1	**4.93±0.02**
	ξ=0.0001	**4.96±0.02**	ξ=2	**4.92±0.01**	ξ=2	4.89±0.01
outflow	ξ=0	5.25±0.03	ξ=0	5.25±0.03	ξ=0	5.25±0.03
	ξ=0.01	5.26±0.01	ξ=0.5	5.27±0.03	ξ=0.5	**5.23±0.01**
	ξ=0.001	**5.23±0.02**	ξ=1	5.26±0.02	ξ=1	**5.23±0.02**
	ξ=0.0001	5.27±0.031	ξ=2	**5.22±0.015**	ξ=2	**5.21±0.01**

Table 4: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 1$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^\xi}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	23.87±0.70	ξ=0	23.87±0.70	ξ=0	23.87±0.70
	ξ=0.01	**23.65±0.27**	ξ=0.5	**23.45±0.13**	ξ=0.5	**23.32±0.39**
	ξ=0.001	**23.67±0.15**	ξ=1	**23.76±0.38**	ξ=1	**23.38±0.45**
	ξ=0.0001	**23.46±0.36**	ξ=2	**23.55±0.42**	ξ=2	**23.61±0.48**
outflow	ξ=0	24.47±0.60	ξ=0	24.47±0.60	ξ=0	24.47±0.60
	ξ=0.01	**24.39±0.42**	ξ=0.5	**24.24±0.19**	ξ=0.5	**24.21±0.24**
	ξ=0.001	**24.41±0.25**	ξ=1	24.55±0.32	ξ=1	**24.41±0.33**
	ξ=0.0001	**24.18±0.26**	ξ=2	24.50±0.36	ξ=2	**24.23±0.20**

Table 5: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 1$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	4.93±0.02	ξ=0	4.93±0.02	ξ=0	4.93±0.02
	ξ=0.01	4.95±0.02	ξ=0.5	4.96±0.01	ξ=0.5	4.95±0.04
	ξ=0.001	4.97±0.04	ξ=1	4.95±0.02	ξ=1	4.94±0.02
	ξ=0.0001	4.96±0.01	ξ=2	**4.92±0.04**	ξ=2	**4.91±0.01**
OUTFLOW	ξ=0	5.25±0.03	ξ=0	5.25±0.03	ξ=0	5.25±0.03
	ξ=0.01	5.26±0.02	ξ=0.5	5.27±0.01	ξ=0.5	**5.23±0.03**
	ξ=0.001	5.25±0.01	ξ=1	**5.23±0.03**	ξ=1	5.25±0.03
	ξ=0.0001	5.26±0.01	ξ=2	**5.22±0.01**	ξ=2	**5.20±0.01**

Table 6: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 1$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	23.52±0.26	ξ=0	23.52±0.26	ξ=0	23.52±0.26
	ξ=0.01	23.60±0.25	ξ=0.5	24.15±0.25	ξ=0.5	23.54±0.42
	ξ=0.001	23.70±0.61	ξ=1	23.57±0.36	ξ=1	**23.33±0.40**
	ξ=0.0001	**23.47±0.29**	ξ=2	**23.46±0.27**	ξ=2	**23.50±0.54**
OUTFLOW	ξ=0	24.35±0.43	ξ=0	24.35±0.43	ξ=0	24.35±0.43
	ξ=0.01	**24.27±0.28**	ξ=0.5	24.70±0.40	ξ=0.5	**24.24±0.30**
	ξ=0.001	**24.27±0.38**	ξ=1	**24.26±0.18**	ξ=1	**24.04±0.33**
	ξ=0.0001	**24.32±0.40**	ξ=2	**24.25±0.25**	ξ=2	24.47±0.38

Table 7: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 1$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^\xi}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
inflow	ξ=0	4.95±0.03	ξ=0	4.95±0.03	ξ=0	4.95±0.03
	ξ=0.01	**4.94±0.01**	ξ=0.5	4.97±0.02	ξ=0.5	**4.94±0.02**
	ξ=0.001	**4.94±0.03**	ξ=1	**4.94±0.02**	ξ=1	**4.93±0.01**
	ξ=0.0001	4.95±0.03	ξ=2	**4.93±0.02**	ξ=2	**4.91±0.01**
outflow	ξ=0	5.24±0.04	ξ=0	5.24±0.04	ξ=0	5.24±0.04
	ξ=0.01	5.24±0.02	ξ=0.5	5.25±0.03	ξ=0.5	5.26±0.03
	ξ=0.001	**5.23±0.02**	ξ=1	**5.23±0.02**	ξ=1	5.26±0.03
	ξ=0.0001	**5.23±0.01**	ξ=2	**5.23±0.03**	ξ=2	5.24±0.02

Table 8: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 1$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^\xi}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
inflow	ξ=0	23.82±0.74	ξ=0	23.82±0.74	ξ=0	23.82±0.74
	ξ=0.01	**23.71±0.23**	ξ=0.5	24.02±0.49	ξ=0.5	**23.36±0.32**
	ξ=0.001	**23.72±0.43**	ξ=1	**23.31±0.35**	ξ=1	**23.39±0.27**
	ξ=0.0001	**23.68±0.17**	ξ=2	**23.46±0.53**	ξ=2	**23.63±0.29**
outflow	ξ=0	24.43±0.51	ξ=0	24.43±0.51	ξ=0	24.43±0.51
	ξ=0.01	24.66±0.17	ξ=0.5	24.62±0.26	ξ=0.5	**24.23±0.35**
	ξ=0.001	**24.33±0.33**	ξ=1	**24.00±0.34**	ξ=1	24.44±0.66
	ξ=0.0001	**24.26±0.12**	ξ=2	**24.19±0.45**	ξ=2	**24.37±0.33**

Table 9: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 2$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	4.93±0.01	ξ=0	4.93±0.01	ξ=0	4.93±0.01
	ξ=0.01	4.95±0.02	ξ=0.5	4.95±0.03	ξ=0.5	4.96±0.03
	ξ=0.001	4.96±0.01	ξ=1	4.96±0.01	ξ=1	**4.93±0.01**
	ξ=0.0001	**4.93±0.02**	ξ=2	**4.91±0.01**	ξ=2	**4.89±0.01**
outflow	ξ=0	5.24±0.01	ξ=0	5.24±0.01	ξ=0	5.24±0.01
	ξ=0.01	5.26±0.03	ξ=0.5	5.25±0.02	ξ=0.5	5.25±0.02
	ξ=0.001	5.24±0.02	ξ=1	**5.23±0.02**	ξ=1	**5.23±0.02**
	ξ=0.0001	5.24±0.03	ξ=2	**5.21±0.02**	ξ=2	**5.20±0.03**

Table 10: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 2$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	23.78±0.43	ξ=0	23.78±0.43	ξ=0	23.78±0.43
	ξ=0.01	23.92±0.39	ξ=0.5	**23.63±0.45**	ξ=0.5	23.88±0.44
	ξ=0.001	**23.44±0.22**	ξ=1	23.81±0.48	ξ=1	**23.04±0.29**
	ξ=0.0001	**23.47±0.38**	ξ=2	**23.57±0.42**	ξ=2	**23.54±0.28**
outflow	ξ=0	24.42±0.30	ξ=0	24.42±0.30	ξ=0	24.42±0.30
	ξ=0.01	24.55±0.33	ξ=0.5	24.56±0.30	ξ=0.5	24.53±0.22
	ξ=0.001	**24.41±0.23**	ξ=1	24.61±0.48	ξ=1	**24.15±0.22**
	ξ=0.0001	**24.23±0.46**	ξ=2	**24.35±0.52**	ξ=2	**24.04±0.21**

Table 11: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 2$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln{(t-t'+1)}}$	
inflow	ξ=0	4.94±0.02	ξ=0	4.94±0.02	ξ=0	4.94±0.02
	ξ=0.01	4.98±0.02	ξ=0.5	**4.94±0.02**	ξ=0.5	4.95±0.03
	ξ=0.001	**4.93±0.03**	ξ=1	**4.94±0.03**	ξ=1	4.94±0.04
	ξ=0.0001	4.95±0.00	ξ=2	**4.94±0.03**	ξ=2	**4.92±0.02**
outflow	ξ=0	5.25±0.02	ξ=0	5.25±0.02	ξ=0	5.25±0.02
	ξ=0.01	5.28±0.02	ξ=0.5	**5.25±0.02**	ξ=0.5	**5.25±0.02**
	ξ=0.001	**5.24±0.01**	ξ=1	**5.23±0.03**	ξ=1	**5.24±0.05**
	ξ=0.0001	5.26±0.02	ξ=2	**5.23±0.02**	ξ=2	**5.23±0.03**

Table 12: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 2$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln{(t-t'+1)}}$	
inflow	ξ=0	23.38±0.17	ξ=0	23.38±0.17	ξ=0	23.38±0.17
	ξ=0.01	23.94±0.40	ξ=0.5	23.46±0.23	ξ=0.5	23.70±0.52
	ξ=0.001	23.71±0.16	ξ=1	23.57±0.29	ξ=1	23.60±0.31
	ξ=0.0001	23.87±0.34	ξ=2	23.69±0.18	ξ=2	**23.21±0.34**
outflow	ξ=0	24.31±0.18	ξ=0	24.31±0.18	ξ=0	24.31±0.18
	ξ=0.01	24.56±0.20	ξ=0.5	24.38±0.38	ξ=0.5	24.29±0.48
	ξ=0.001	**24.25±0.42**	ξ=1	24.65±0.37	ξ=1	24.53±0.33
	ξ=0.0001	24.32±0.25	ξ=2	24.46±0.30	ξ=2	**23.96±0.15**

Table 13: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 2$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	4.95±0.01	ξ=0	4.95±0.01	ξ=0	4.95±0.01
	ξ=0.01	4.98±0.03	ξ=0.5	4.96±0.01	ξ=0.5	**4.93±0.03**
	ξ=0.001	**4.94±0.0**	ξ=1	**4.93±0.01**	ξ=1	**4.92±0.02**
	ξ=0.0001	**4.94±0.01**	ξ=2	4.96±0.02	ξ=2	4.92±0.03
outflow	ξ=0	5.25±0.03	ξ=0	5.25±0.03	ξ=0	5.2593±0.03
	ξ=0.01	5.27±0.01	ξ=0.5	5.26±0.01	ξ=0.5	**5.25±0.03**
	ξ=0.001	**5.24±0.02**	ξ=1	**5.23±0.02**	ξ=1	**5.21±0.02**
	ξ=0.0001	5.28±0.03	ξ=2	5.26±0.05	ξ=2	**5.23±0.03**

Table 14: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 2$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	23.57±0.50	ξ=0	23.57±0.50	ξ=0	23.57±0.50
	ξ=0.01	**23.54±0.26**	ξ=0.5	23.66±0.50	ξ=0.5	**23.48±0.45**
	ξ=0.001	23.75±0.39	ξ=1	**23.57±0.28**	ξ=1	**23.37±0.41**
	ξ=0.0001	**23.37±0.36**	ξ=2	**23.19±0.42**	ξ=2	**23.37±0.41**
outflow	ξ=0	24.23±0.33	ξ=0	24.23±0.33	ξ=0	24.23±0.33
	ξ=0.01	24.50±0.31	ξ=0.5	24.35±0.46	ξ=0.5	24.26±0.29
	ξ=0.001	24.49±0.43	ξ=1	24.27±0.30	ξ=1	24.25±0.36
	ξ=0.0001	**23.86±0.35**	ξ=2	**23.81±0.32**	ξ=2	**24.13±0.39**

Table 15: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 2$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	4.95±0.02	ξ=0	4.95±0.02	ξ=0	4.95±0.02
	ξ=0.01	4.97±0.01	ξ=0.5	4.96±0.03	ξ=0.5	**4.94±0.03**
	ξ=0.001	4.95±0.02	ξ=1	**4.95±0.02**	ξ=1	**4.94±0.02**
	ξ=0.0001	**4.93±0.02**	ξ=2	**4.93±0.03**	ξ=2	**4.92±0.03**
OUTFLOW	ξ=0	5.25±0.03	ξ=0	5.25±0.03	ξ=0	5.25±0.03
	ξ=0.01	5.26±0.01	ξ=0.5	**5.24±0.02**	ξ=0.5	**5.23±0.01**
	ξ=0.001	**5.25±0.02**	ξ=1	**5.24±0.03**	ξ=1	**5.24±0.02**
	ξ=0.0001	**5.24±0.04**	ξ=2	**5.24±0.03**	ξ=2	**5.22±0.02**

Table 16: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 2$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	23.56±0.06	ξ=0	23.56±0.06	ξ=0	23.56±0.06
	ξ=0.01	**23.21±0.19**	ξ=0.5	23.73±0.39	ξ=0.5	**23.52±0.29**
	ξ=0.001	**23.40±0.23**	ξ=1	23.73±0.30	ξ=1	**23.39±0.33**
	ξ=0.0001	23.77±0.16	ξ=2	**23.21±0.17**	ξ=2	**23.42±0.49**
OUTFLOW	ξ=0	24.20±0.35	ξ=0	24.20±0.35	ξ=0	24.20±0.35
	ξ=0.01	**24.16±0.26**	ξ=0.5	24.59±0.30	ξ=0.5	**24.14±0.32**
	ξ=0.001	**24.13±0.29**	ξ=1	24.38±0.10	ξ=1	24.63±0.39
	ξ=0.0001	24.26±0.25	ξ=2	**23.99±0.28**	ξ=2	24.32±0.40

Table 17: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 3$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	4.9427±0.01958	ξ=0	4.9427±0.01958	ξ=0	4.9427±0.01958
	ξ=0.01	4.95±0.01	ξ=0.5	4.95±0.01	ξ=0.5	**4.92±0.01**
	ξ=0.001	4.94±0.03	ξ=1	4.94±0.01	ξ=1	**4.92±0.01**
	ξ=0.0001	4.95±0.03	ξ=2	4.94±0.03	ξ=2	**4.92±0.01**
OUTFLOW	ξ=0	5.25±0.01	ξ=0	5.25±0.01	ξ=0	5.25±0.01
	ξ=0.01	5.26±0.01	ξ=0.5	5.26±0.02	ξ=0.5	**5.24±0.01**
	ξ=0.001	**5.22±0.03**	ξ=1	**5.22±0.01**	ξ=1	**5.22±0.03**
	ξ=0.0001	**5.23±0.02**	ξ=2	**5.24±0.02**	ξ=2	**5.22±0.01**

Table 18: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 3$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	23.39±0.24	ξ=0	23.39±0.24	ξ=0	23.39±0.24
	ξ=0.01	23.53±0.32	ξ=0.5	23.82±0.39	ξ=0.5	23.58±0.51
	ξ=0.001	23.83±0.34	ξ=1	23.54±0.21	ξ=1	**23.23±0.17**
	ξ=0.0001	23.97±0.27	ξ=2	23.48±0.25	ξ=2	23.57±0.64
outflow	ξ=0	24.38±0.62	ξ=0	24.38±0.62	ξ=0	24.38±0.62
	ξ=0.01	**24.36±0.37**	ξ=0.5	**24.33±0.23**	ξ=0.5	24.46±0.56
	ξ=0.001	24.64±0.21	ξ=1	**24.32±0.13**	ξ=1	**24.10±0.11**
	ξ=0.0001	24.66±0.32	ξ=2	**24.24±0.25**	ξ=2	**24.33±0.37**

Table 19: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 3$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	4.93±0.03	ξ=0	4.93±0.03	ξ=0	4.93±0.03
	ξ=0.01	4.96±0.05	ξ=0.5	4.97±0.03	ξ=0.5	4.95±0.04
	ξ=0.001	4.93±0.03	ξ=1	4.95±0.02	ξ=1	**4.91±0.04**
	ξ=0.0001	4.94±0.03	ξ=2	**4.93±0.03**	ξ=2	**4.92±0.01**
outflow	ξ=0	5.25±0.03	ξ=0	5.25±0.03	ξ=0	5.25±0.03
	ξ=0.01	5.26±0.03	ξ=0.5	5.25±0.02	ξ=0.5	**5.22±0.01**
	ξ=0.001	**5.22±0.01**	ξ=1	**5.24±0.02**	ξ=1	**5.22±0.04**
	ξ=0.0001	**5.23±0.01**	ξ=2	**5.24±0.03**	ξ=2	**5.22±0.01**

Table 20: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 3$, $L = 2$).

TYPE	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	23.66±0.33	ξ=0	23.66±0.33	ξ=0	23.66±0.33
	ξ=0.01	23.77±0.60	ξ=0.5	23.98±0.71	ξ=0.5	23.90±0.38
	ξ=0.001	23.67±0.34	ξ=1	23.81±0.32	ξ=1	**23.37±0.22**
	ξ=0.0001	**23.50±0.40**	ξ=2	**23.52±0.49**	ξ=2	**23.53±0.34**
OUTFLOW	ξ=0	24.33±0.38	ξ=0	24.33±0.38	ξ=0	24.33±0.38
	ξ=0.01	24.40±0.61	ξ=0.5	24.68±0.32	ξ=0.5	24.45±0.53
	ξ=0.001	**24.26±0.36**	ξ=1	**24.32±0.44**	ξ=1	**24.11±0.17**
	ξ=0.0001	**24.24±0.38**	ξ=2	**24.28±0.49**	ξ=2	**24.14±0.13**

Table 21: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 3$, $L = 4$).

TYPE	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	4.9358±0.0189	ξ=0	4.9358±0.0189	ξ=0	4.9358±0.0189
	ξ=0.01	4.9445±0.0344	ξ=0.5	4.9855±0.0345	ξ=0.5	4.9481±0.035
	ξ=0.001	4.9512±0.0243	ξ=1	4.9713±0.0315	ξ=1	**4.9136±0.0263**
	ξ=0.0001	**4.9290±0.0198**	ξ=2	4.9576±0.0324	ξ=2	4.9374±0.0354
OUTFLOW	ξ=0	5.2458±0.0190	ξ=0	5.2458±0.0190	ξ=0	5.2458±0.0190
	ξ=0.01	5.2521±0.0297	ξ=0.5	5.2731±0.0386	ξ=0.5	5.2678±0.0336
	ξ=0.001	5.2568±0.0372	ξ=1	5.2625±0.0509	ξ=1	**5.2236±0.0255**
	ξ=0.0001	**5.2315±0.0176**	ξ=2	**5.2327±0.0256**	ξ=2	**5.2425±0.0277**

Table 22: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 3$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t - t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	23.44±0.32	ξ=0	23.44±0.32	ξ=0	23.44±0.32
	ξ=0.01	23.65±0.26	ξ=0.5	**23.34±0.34**	ξ=0.5	23.84±0.75
	ξ=0.001	**23.26±0.36**	ξ=1	**23.42±0.20**	ξ=1	**23.30±0.33**
	ξ=0.0001	23.72±0.47	ξ=2	23.46±0.38	ξ=2	23.52±0.45
outflow	ξ=0	24.20±0.26	ξ=0	24.20±0.26	ξ=0	24.20±0.26
	ξ=0.01	24.41±0.34	ξ=0.5	24.22±0.32	ξ=0.5	24.49±0.52
	ξ=0.001	**24.15±0.32**	ξ=1	**24.19±0.08**	ξ=1	**24.08±0.28**
	ξ=0.0001	24.47±0.43	ξ=2	24.33±0.44	ξ=2	24.50±0.38

Table 23: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 3$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t - t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	4.95±0.03	ξ=0	4.95±0.03	ξ=0	4.95±0.03
	ξ=0.01	4.95±0.02	ξ=0.5	**4.95±0.02**	ξ=0.5	**4.94±0.02**
	ξ=0.001	**4.95±0.03**	ξ=1	**4.94±0.02**	ξ=1	**4.92±0.02**
	ξ=0.0001	4.95±0.02	ξ=2	**4.95±0.02**	ξ=2	4.95±0.03
outflow	ξ=0	5.24±0.04	ξ=0	5.24±0.04	ξ=0	5.24±0.04
	ξ=0.01	5.25±0.02	ξ=0.5	5.25±0.01	ξ=0.5	**5.24±0.02**
	ξ=0.001	**5.23±0.02**	ξ=1	**5.22±0.01**	ξ=1	**5.21±0.02**
	ξ=0.0001	5.26±0.03	ξ=2	5.25±0.03	ξ=2	**5.22±0.02**

Table 24: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 3$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	23.39±0.14	ξ=0	23.39±0.14	ξ=0	23.39±0.14
	ξ=0.01	24.04±0.44	ξ=0.5	23.83±0.49	ξ=0.5	23.53±0.28
	ξ=0.001	23.61±0.16	ξ=1	23.62±0.33	ξ=1	23.50±0.30
	ξ=0.0001	23.67±0.37	ξ=2	23.62±0.39	ξ=2	23.98±0.89
outflow	ξ=0	24.11±0.37	ξ=0	24.11±0.37	ξ=0	24.11±0.37
	ξ=0.01	24.92±0.37	ξ=0.5	24.50±0.41	ξ=0.5	24.56±0.40
	ξ=0.001	24.33±0.23	ξ=1	24.40±0.43	ξ=1	24.34±0.28
	ξ=0.0001	24.44±0.44	ξ=2	24.52±0.45	ξ=2	24.77±0.66

Table 25: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 4$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	4.94±0.01	ξ=0	4.94±0.01	ξ=0	4.94±0.01
	ξ=0.01	4.95±0.02	ξ=0.5	4.98±0.04	ξ=0.5	**4.92±0.01**
	ξ=0.001	**4.92±0.02**	ξ=1	4.95±0.03	ξ=1	**4.93±0.01**
	ξ=0.0001	4.94±0.02	ξ=2	**4.93±0.03**	ξ=2	**4.90±0.02**
outflow	ξ=0	5.24±0.01	ξ=0	5.24±0.01	ξ=0	5.24±0.01
	ξ=0.01	**5.23±0.01**	ξ=0.5	5.29±0.04	ξ=0.5	**5.23±0.01**
	ξ=0.001	**5.23±0.03**	ξ=1	**5.22±0.02**	ξ=1	**5.22±0.01**
	ξ=0.0001	**5.24±0.01**	ξ=2	**5.22±0.02**	ξ=2	**5.21±0.01**

Table 26: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 4$, $L = 1$).

TYPE	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	23.65±0.48	ξ=0	23.65±0.48	ξ=0	23.65±0.48
	ξ=0.01	23.70±0.73	ξ=0.5	**23.50±0.38**	ξ=0.5	**23.42±0.24**
	ξ=0.001	23.70±0.31	ξ=1	23.69±0.46	ξ=1	**23.40±0.61**
	ξ=0.0001	**23.49±0.39**	ξ=2	23.62±0.53	ξ=2	**23.28±0.29**
OUTFLOW	ξ=0	24.30±0.25	ξ=0	24.30±0.25	ξ=0	24.30±0.25
	ξ=0.01	24.66±0.48	ξ=0.5	**24.15±0.45**	ξ=0.5	**24.28±0.44**
	ξ=0.001	**24.27±0.18**	ξ=1	24.37±0.43	ξ=1	**24.10±0.67**
	ξ=0.0001	**24.11±0.23**	ξ=2	24.30±0.33	ξ=2	**23.97±0.18**

Table 27: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 4$, $L = 2$).

TYPE	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	4.93±0.01	ξ=0	4.93±0.01	ξ=0	4.93±0.01
	ξ=0.01	4.94±0.02	ξ=0.5	4.94±0.01	ξ=0.5	4.9407±0.04
	ξ=0.001	4.96±0.02	ξ=1	4.93±0.02	ξ=1	**4.90±0.02**
	ξ=0.0001	4.95±0.03	ξ=2	**4.92±0.03**	ξ=2	**4.93±0.02**
OUTFLOW	ξ=0	5.24±0.0278	ξ=0	5.24±0.02	ξ=0	5.24±0.02
	ξ=0.01	**5.23±0.02**	ξ=0.5	**5.24±0.01**	ξ=0.5	**5.23±0.03**
	ξ=0.001	5.25±0.02	ξ=1	**5.22±0.03**	ξ=1	**5.20±0.031**
	ξ=0.0001	5.25±0.03	ξ=2	**5.22±0.02**	ξ=2	5.24±0.01

Table 28: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 4$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	23.62±0.34	ξ=0	23.62±0.34	ξ=0	23.62±0.34
	ξ=0.01	23.75±0.36	ξ=0.5	23.63±0.48	ξ=0.5	23.63±0.21
	ξ=0.001	**23.53±0.61**	ξ=1	**23.59±0.43**	ξ=1	**23.51±0.32**
	ξ=0.0001	**23.23±0.20**	ξ=2	**23.47±0.25**	ξ=2	**23.18±0.40**
OUTFLOW	ξ=0	24.46±0.26	ξ=0	24.46±0.26	ξ=0	24.46±0.26
	ξ=0.01	**24.39±0.27**	ξ=0.5	24.59±0.40	ξ=0.5	24.48±0.34
	ξ=0.001	**24.26±0.36**	ξ=1	**24.44±0.34**	ξ=1	**24.21±0.24**
	ξ=0.0001	**24.06±0.30**	ξ=2	24.49±0.47	ξ=2	**23.92±0.32**

Table 29: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 4$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	4.94±0.02	ξ=0	4.94±0.02	ξ=0	4.94±0.02
	ξ=0.01	4.95±0.03	ξ=0.5	4.97±0.05	ξ=0.5	**4.93±0.02**
	ξ=0.001	4.96±0.02	ξ=1	**4.93±0.01**	ξ=1	**4.93±0.02**
	ξ=0.0001	4.95±0.03	ξ=2	4.94±0.04	ξ=2	**4.90±0.01**
OUTFLOW	ξ=0	5.25±0.01	ξ=0	5.25±0.01	ξ=0	5.25±0.01
	ξ=0.01	5.26±0.03	ξ=0.5	5.26±0.03	ξ=0.5	**5.24±0.04**
	ξ=0.001	5.27±0.04	ξ=1	**5.23±0.02**	ξ=1	**5.23±0.03**
	ξ=0.0001	**5.23±0.03**	ξ=2	**5.25±0.03**	ξ=2	**5.22±0.02**

Table 30: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 4$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	23.38±0.27	ξ=0	23.38±0.27	ξ=0	23.38±0.27
	ξ=0.01	23.58±0.56	ξ=0.5	23.46±0.15	ξ=0.5	23.95±0.41
	ξ=0.001	23.63±0.29	ξ=1	23.56±0.24	ξ=1	**23.37±0.33**
	ξ=0.0001	23.63±0.41	ξ=2	23.57±0.30	ξ=2	23.45±0.56
outflow	ξ=0	24.33±0.47	ξ=0	24.33±0.47	ξ=0	24.33±0.47
	ξ=0.01	**24.30±0.46**	ξ=0.5	**24.28±0.14**	ξ=0.5	24.49±0.28
	ξ=0.001	24.55±0.46	ξ=1	24.34±0.50	ξ=1	24.48±0.41
	ξ=0.0001	24.35±0.42	ξ=2	24.33±0.31	ξ=2	**24.28±0.42**

Table 31: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAE. ($K = 4$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	4.93±0.01	ξ=0	4.93±0.01	ξ=0	4.93±0.01
	ξ=0.01	4.94±0.0	ξ=0.5	4.98±0.03	ξ=0.5	**4.92±0.01**
	ξ=0.001	4.94±0.03	ξ=1	4.95±0.01	ξ=1	**4.92±0.01**
	ξ=0.0001	4.95±0.02	ξ=2	4.94±0.02	ξ=2	**4.91±0.03**
outflow	ξ=0	5.22±0.01	ξ=0	5.22±0.01	ξ=0	5.22±0.01
	ξ=0.01	5.26±0.02	ξ=0.5	5.28±0.03	ξ=0.5	5.25±0.01
	ξ=0.001	5.24±0.01	ξ=1	5.23±0.01	ξ=1	5.23±0.01
	ξ=0.0001	5.25±0.04	ξ=2	5.24±0.02	ξ=2	**5.21±0.01**

Table 32: Comparison of models with and without decay on dataset **NYCBike1** in terms of MAPE(%). ($K = 4$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	23.94±0.28	ξ=0	23.94±0.28	ξ=0	23.94±0.28
	ξ=0.01	**23.53±0.25**	ξ=0.5	**23.70±0.35**	ξ=0.5	**23.71±0.39**
	ξ=0.001	**23.63±0.29**	ξ=1	**23.45±0.25**	ξ=1	**23.39±0.26**
	ξ=0.0001	**23.79±0.69**	ξ=2	**23.32±0.16**	ξ=2	**23.39±0.43**
outflow	ξ=0	24.53±0.16	ξ=0	24.53±0.16	ξ=0	24.53±0.16
	ξ=0.01	**24.45±0.28**	ξ=0.5	24.57±0.40	ξ=0.5	**24.40±0.25**
	ξ=0.001	**24.38±0.20**	ξ=1	**24.25±0.33**	ξ=1	**24.23±0.27**
	ξ=0.0001	**24.40±0.49**	ξ=2	**24.28±0.29**	ξ=2	**24.23±0.50**

Table 33: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 1$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	12.23±0.10	ξ=0	12.23±0.10	ξ=0	12.23±0.10
	ξ=0.01	**12.21±0.07**	ξ=0.5	**12.09±0.10**	ξ=0.5	**12.10±0.11**
	ξ=0.001	**12.18±0.18**	ξ=1	**12.13±0.10**	ξ=1	12.18±0.13
	ξ=0.0001	**12.13±0.13**	ξ=2	**12.14±0.16**	ξ=2	**12.25±0.17**
outflow	ξ=0	9.90±0.08	ξ=0	9.90±0.08	ξ=0	9.90±0.08
	ξ=0.01	**9.83±0.06**	ξ=0.5	9.91±0.13	ξ=0.5	**9.87±0.07**
	ξ=0.001	**9.86±0.14**	ξ=1	9.91±0.15	ξ=1	**9.85±0.10**
	ξ=0.0001	**9.86±0.14**	ξ=2	**9.76±0.12**	ξ=2	**9.87±0.10**

Table 34: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 1$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t - t'))$		$\alpha_{t'} = \frac{1}{(t-t')^\xi}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	17.16±0.56	ξ=0	17.16±0.56	ξ=0	17.16±0.56
	ξ=0.01	**16.74±0.60**	ξ=0.5	**16.92±0.42**	ξ=0.5	**16.77±0.26**
	ξ=0.001	**16.91±0.13**	ξ=1	17.83±1.22	ξ=1	**16.95±0.63**
	ξ=0.0001	**16.85±0.49**	ξ=2	**17.05±0.59**	ξ=2	17.35±1.29
OUTFLOW	ξ=0	17.27±0.3	ξ=0	17.27±0.3	ξ=0	17.27±0.3
	ξ=0.01	17.54±0.63	ξ=0.5	18.30±1.23	ξ=0.5	17.74±0.76
	ξ=0.001	**17.17±0.31**	ξ=1	18.06±1.00	ξ=1	17.76±0.42
	ξ=0.0001	17.46±0.98	ξ=2	17.28±0.28	ξ=2	17.95±1.32

Table 35: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 1$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t - t'))$		$\alpha_{t'} = \frac{1}{(t-t')^\xi}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	12.15±0.08	ξ=0	12.15±0.08	ξ=0	12.15±0.08
	ξ=0.01	**12.15±0.11**	ξ=0.5	12.20±0.17	ξ=0.5	**12.07±0.05**
	ξ=0.001	**12.07±0.15**	ξ=1	12.16±0.12	ξ=1	12.1±0.09
	ξ=0.0001	12.19±0.03	ξ=2	12.25±0.15	ξ=2	12.17±0.17
OUTFLOW	ξ=0	9.82±0.10	ξ=0	9.82±0.10	ξ=0	9.82±0.10
	ξ=0.01	9.86±0.17	ξ=0.5	9.84±0.13	ξ=0.5	**9.73±0.07**
	ξ=0.001	9.83±0.12	ξ=1	**9.79±0.09**	ξ=1	**9.81±0.12**
	ξ=0.0001	**9.79±0.14**	ξ=2	9.83±0.18	ξ=2	**9.78±0.06**

Table 36: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 1$, $L = 2$).

TYPE	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	16.71±0.27	ξ=0	16.71±0.27	ξ=0	16.71±0.27
	ξ=0.01	17.08±0.78	ξ=0.5	16.73±0.33	ξ=0.5	17.07±0.21
	ξ=0.001	17.01±0.76	ξ=1	**16.51±0.41**	ξ=1	16.72±0.09
	ξ=0.0001	17.08±0.70	ξ=2	16.82±0.63	ξ=2	16.94±0.61
OUTFLOW	ξ=0	17.39±0.5	ξ=0	17.39±0.5	ξ=0	17.39±0.5
	ξ=0.01	17.47±0.61	ξ=0.5	17.42±0.91	ξ=0.5	17.65±0.53
	ξ=0.001	17.73±0.66	ξ=1	**17.10±0.60**	ξ=1	**17.31±0.46**
	ξ=0.0001	**17.08±0.20**	ξ=2	17.57±0.71	ξ=2	18.34±1.45

Table 37: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 1$, $L = 4$).

TYPE	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	12.18±0.21	ξ=0	12.18±0.21	ξ=0	12.18±0.21
	ξ=0.01	**12.16±0.13**	ξ=0.5	**12.15±0.11**	ξ=0.5	12.08±0.14
	ξ=0.001	12.21±0.12	ξ=1	**12.11±0.13**	ξ=1	12.35±0.13
	ξ=0.0001	**12.15±0.10**	ξ=2	**12.06±0.04**	ξ=2	12.24±0.07
OUTFLOW	ξ=0	9.77±0.08	ξ=0	9.77±0.08	ξ=0	9.77±0.08
	ξ=0.01	9.87±0.08	ξ=0.5	9.93±0.13	ξ=0.5	9.87±0.19
	ξ=0.001	9.84±0.13	ξ=1	**9.76±0.15**	ξ=1	9.93±0.19
	ξ=0.0001	9.80±0.07	ξ=2	9.79±0.13	ξ=2	**9.74±0.11**

Table 38: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 1$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	16.84±0.46	ξ=0	16.84±0.46	ξ=0	16.84±0.46
	ξ=0.01	**16.74±0.43**	ξ=0.5	17.01±0.51	ξ=0.5	16.90±0.33
	ξ=0.001	16.91±0.89	ξ=1	16.95±0.47	ξ=1	17.43±0.87
	ξ=0.0001	**16.69±0.52**	ξ=2	**16.68±0.33**	ξ=2	17.69±1.05
OUTFLOW	ξ=0	17.18±0.57	ξ=0	17.18±0.57	ξ=0	17.18±0.57
	ξ=0.01	**17.03±0.31**	ξ=0.5	17.73±0.55	ξ=0.5	18.18±1.24
	ξ=0.001	17.27±0.38	ξ=1	17.39±0.17	ξ=1	18.01±0.80
	ξ=0.0001	17.52±0.50	ξ=2	18.15±1.43	ξ=2	17.42±0.47

Table 39: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 1$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	12.10±0.09	ξ=0	12.10±0.09	ξ=0	12.10±0.09
	ξ=0.01	**12.09±0.16**	ξ=0.5	12.18±0.18	ξ=0.5	12.15±0.08
	ξ=0.001	12.16±0.15	ξ=1	12.10±0.12	ξ=1	12.12±0.10
	ξ=0.0001	12.18±0.08	ξ=2	12.14±0.07	ξ=2	12.28±0.10
OUTFLOW	ξ=0	9.79±0.09	ξ=0	9.79±0.09	ξ=0	9.79±0.09
	ξ=0.01	**9.78±0.10**	ξ=0.5	9.86±0.14	ξ=0.5	9.83±0.09
	ξ=0.001	9.87±0.08	ξ=1	**9.79±0.11**	ξ=1	**9.77±0.11**
	ξ=0.0001	9.83±0.07	ξ=2	**9.79±0.11**	ξ=2	9.83±0.08

Table 40: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 1$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	16.76±0.21	ξ=0	16.76±0.21	ξ=0	16.76±0.21
	ξ=0.01	**16.48±0.36**	ξ=0.5	16.77±0.22	ξ=0.5	16.82±0.62
	ξ=0.001	**16.59±0.29**	ξ=1	16.95±0.62	ξ=1	17.11±1.06
	ξ=0.0001	**16.66±0.23**	ξ=2	16.84±0.33	ξ=2	17.79±1.17
OUTFLOW	ξ=0	17.51±0.34	ξ=0	17.51±0.34	ξ=0	17.51±0.34
	ξ=0.01	**17.04±0.44**	ξ=0.5	**17.47±0.32**	ξ=0.5	17.60±0.85
	ξ=0.001	17.97±0.75	ξ=1	17.54±0.92	ξ=1	**17.03±0.22**
	ξ=0.0001	**16.89±0.31**	ξ=2	17.88±1.19	ξ=2	17.70±0.48

Table 41: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 2$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	12.18±0.13	ξ=0	12.18±0.13	ξ=0	12.18±0.13
	ξ=0.01	12.21±0.14	ξ=0.5	**12.11±0.09**	ξ=0.5	**12.11±0.11**
	ξ=0.001	**12.17±0.14**	ξ=1	12.19±0.18	ξ=1	**12.13±0.19**
	ξ=0.0001	**12.08±0.08**	ξ=2	**12.13±0.06**	ξ=2	12.22±0.19
OUTFLOW	ξ=0	9.85±0.09	ξ=0	9.85±0.09	ξ=0	9.85±0.09
	ξ=0.01	9.92±0.23	ξ=0.5	**9.82±0.07**	ξ=0.5	9.89±0.09
	ξ=0.001	9.87±0.06	ξ=1	9.88±0.22	ξ=1	**9.79±0.25**
	ξ=0.0001	9.86±0.10	ξ=2	**9.73±0.15**	ξ=2	9.86±0.15

Table 42: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K=2$, $L=1$).

Type	$\alpha_{t'}=\exp(-\xi(t-t'))$		$\alpha_{t'}=\frac{1}{(t-t')^{\xi}}$		$\alpha_{t'}=\frac{1}{\xi\ln(t-t'+1)}$	
INFLOW	ξ=0	16.75±0.34	ξ=0	16.75±0.34	ξ=0	16.75±0.34
	ξ=0.01	17.10±0.65	ξ=0.5	**16.63±0.48**	ξ=0.5	16.89±0.27
	ξ=0.001	17.02±0.57	ξ=1	17.65±1.23	ξ=1	16.84±0.49
	ξ=0.0001	16.78±0.40	ξ=2	16.89±0.71	ξ=2	**16.52±0.18**
OUTFLOW	ξ=0	18.02±0.59	ξ=0	18.02±0.59	ξ=0	18.02±0.59
	ξ=0.01	**17.55±1.23**	ξ=0.5	**17.17±0.56**	ξ=0.5	**17.62±0.55**
	ξ=0.001	**17.09±0.25**	ξ=1	**17.60±1.03**	ξ=1	**17.85±1.10**
	ξ=0.0001	**17.31±0.60**	ξ=2	**17.25±0.37**	ξ=2	**17.06±0.25**

Table 43: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K=2$, $L=2$).

Type	$\alpha_{t'}=\exp(-\xi(t-t'))$		$\alpha_{t'}=\frac{1}{(t-t')^{\xi}}$		$\alpha_{t'}=\frac{1}{\xi\ln(t-t'+1)}$	
INFLOW	ξ=0	12.11±0.09	ξ=0	12.11±0.09	ξ=0	12.11±0.09
	ξ=0.01	12.14±0.11	ξ=0.5	12.16±0.02	ξ=0.5	**12.08±0.14**
	ξ=0.001	12.23±0.09	ξ=1	12.11±0.10	ξ=1	12.29±0.21
	ξ=0.0001	**12.08±0.05**	ξ=2	12.20±0.19	ξ=2	12.13±0.06
OUTFLOW	ξ=0	9.76±0.14	ξ=0	9.76±0.14	ξ=0	9.76±0.14
	ξ=0.01	9.80±0.10	ξ=0.5	9.83±0.08	ξ=0.5	9.70±0.09
	ξ=0.001	9.84±0.15	ξ=1	9.79±0.04	ξ=1	9.87±0.13
	ξ=0.0001	**9.73±0.09**	ξ=2	9.87±0.16	ξ=2	9.71±0.09

Table 44: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 2$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	16.83±0.53	ξ=0	16.83±0.53	ξ=0	16.83±0.53
	ξ=0.01	17.01±0.55	ξ=0.5	**16.56±0.16**	ξ=0.5	**16.30±0.20**
	ξ=0.001	17.01±0.89	ξ=1	16.94±0.38	ξ=1	17.61±0.54
	ξ=0.0001	16.90±0.34	ξ=2	17.18±0.41	ξ=2	16.84±0.44
OUTFLOW	ξ=0	17.64±1.13	ξ=0	17.64±1.13	ξ=0	17.64±1.13
	ξ=0.01	17.79±0.89	ξ=0.5	**17.21±0.52**	ξ=0.5	**16.87±0.23**
	ξ=0.001	**17.39±0.71**	ξ=1	17.66±0.65	ξ=1	18.04±0.89
	ξ=0.0001	**17.35±0.57**	ξ=2	18.71±1.37	ξ=2	17.97±1.28

Table 45: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 2$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	12.11±0.08	ξ=0	12.11±0.08	ξ=0	12.11±0.08
	ξ=0.01	12.18±0.12	ξ=0.5	12.13±0.13	ξ=0.5	**12.03±0.10**
	ξ=0.001	12.25±0.11	ξ=1	**12.02±0.03**	ξ=1	12.25±0.13
	ξ=0.0001	**12.08±0.06**	ξ=2	12.21±0.14	ξ=2	12.20±0.15
OUTFLOW	ξ=0	9.81±0.11	ξ=0	9.81±0.11	ξ=0	9.81±0.11
	ξ=0.01	9.86±0.14	ξ=0.5	9.92±0.15	ξ=0.5	**9.78±0.11**
	ξ=0.001	9.94±0.16	ξ=1	**9.74±0.04**	ξ=1	**9.79±0.06**
	ξ=0.0001	**9.69±0.04**	ξ=2	9.85±0.12	ξ=2	9.83±0.09

Table 46: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 2$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
inflow	ξ=0	17.01±0.78	ξ=0	17.01±0.78	ξ=0	17.01±0.78
	ξ=0.01	17.16±0.56	ξ=0.5	17.15±0.42	ξ=0.5	**16.79±0.31**
	ξ=0.001	17.39±0.81	ξ=1	17.07±0.46	ξ=1	17.28±0.61
	ξ=0.0001	**16.98±0.58**	ξ=2	**16.66±0.13**	ξ=2	17.90±1.54
outflow	ξ=0	17.73±0.83	ξ=0	17.73±0.83	ξ=0	17.73±0.83
	ξ=0.01	17.80±0.95	ξ=0.5	18.11±1.01	ξ=0.5	**17.71±0.55**
	ξ=0.001	18.27±1.34	ξ=1	**17.27±0.35**	ξ=1	18.13±0.55
	ξ=0.0001	**17.18±0.27**	ξ=2	17.45±0.57	ξ=2	18.45±1.05

Table 47: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 2$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
inflow	ξ=0	12.14±0.13	ξ=0	12.14±0.13	ξ=0	12.14±0.13
	ξ=0.01	12.15±0.10	ξ=0.5	12.16±0.10	ξ=0.5	**12.13±0.03**
	ξ=0.001	12.19±0.16	ξ=1	**12.10±0.07**	ξ=1	12.28±0.10
	ξ=0.0001	**12.12±0.13**	ξ=2	12.21±0.12	ξ=2	12.21±0.09
outflow	ξ=0	9.85±0.11	ξ=0	9.85±0.11	ξ=0	9.85±0.11
	ξ=0.01	9.86±0.12	ξ=0.5	**9.81±0.07**	ξ=0.5	**9.78±0.09**
	ξ=0.001	9.87±0.18	ξ=1	**9.84±0.20**	ξ=1	9.90±0.10
	ξ=0.0001	**9.73±0.03**	ξ=2	**9.77±0.13**	ξ=2	**9.81±0.07**

Table 48: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 2$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	17.01±0.49	ξ=0	17.01±0.49	ξ=0	17.01±0.49
	ξ=0.01	17.11±0.52	ξ=0.5	**16.83±0.37**	ξ=0.5	17.25±0.98
	ξ=0.001	17.50±1.44	ξ=1	**16.64±0.47**	ξ=1	17.10±0.51
	ξ=0.0001	**16.53±0.29**	ξ=2	17.06±0.60	ξ=2	17.44±0.98
OUTFLOW	ξ=0	17.18±0.36	ξ=0	17.18±0.36	ξ=0	17.18±0.36
	ξ=0.01	17.84±0.86	ξ=0.5	17.99±0.77	ξ=0.5	17.41±0.58
	ξ=0.001	17.55±0.32	ξ=1	17.60±0.73	ξ=1	18.06±0.74
	ξ=0.0001	**16.97±0.17**	ξ=2	18.29±0.93	ξ=2	**17.01±0.38**

Table 49: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 3$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	12.11±0.10	ξ=0	12.11±0.10	ξ=0	12.11±0.10
	ξ=0.01	12.12±0.15	ξ=0.5	12.12±0.09	ξ=0.5	**12.08±0.13**
	ξ=0.001	12.14±0.09	ξ=1	12.15±0.14	ξ=1	12.18±0.14
	ξ=0.0001	12.14±0.07	ξ=2	12.23±0.10	ξ=2	**12.10±0.14**
OUTFLOW	ξ=0	9.75±0.14	ξ=0	9.75±0.14	ξ=0	9.75±0.14
	ξ=0.01	9.80±0.18	ξ=0.5	9.87±0.14	ξ=0.5	9.76±0.21
	ξ=0.001	9.75±0.11	ξ=1	9.78±0.12	ξ=1	9.80±0.09
	ξ=0.0001	9.78±0.06	ξ=2	9.75±0.06	ξ=2	**9.67±0.04**

Table 50: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 3$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	16.66±0.57	ξ=0	16.66±0.57	ξ=0	16.66±0.57
	ξ=0.01	17.07±0.65	ξ=0.5	16.78±0.27	ξ=0.5	**16.52±0.33**
	ξ=0.001	**16.57±0.21**	ξ=1	16.97±0.57	ξ=1	17.25±0.62
	ξ=0.0001	16.70±0.32	ξ=2	17.04±0.40	ξ=2	17.39±0.81
OUTFLOW	ξ=0	17.25±0.61	ξ=0	17.25±0.61	ξ=0	17.25±0.61
	ξ=0.01	17.87±0.98	ξ=0.5	17.74±0.95	ξ=0.5	**16.99±0.39**
	ξ=0.001	**16.99±0.18**	ξ=1	18.41±0.74	ξ=1	**17.13±0.16**
	ξ=0.0001	17.66±0.68	ξ=2	**17.21±0.20**	ξ=2	17.52±0.39

Table 51: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 3$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	12.20±0.06	ξ=0	12.20±0.06	ξ=0	12.20±0.06
	ξ=0.01	**12.19±0.14**	ξ=0.5	**12.19±0.14**	ξ=0.5	**12.07±0.09**
	ξ=0.001	**12.15±0.18**	ξ=1	**12.08±0.11**	ξ=1	**12.12±0.17**
	ξ=0.0001	**12.08±0.08**	ξ=2	12.27±0.07	ξ=2	12.28±0.25
OUTFLOW	ξ=0	9.79±0.07	ξ=0	9.79±0.07	ξ=0	9.79±0.07
	ξ=0.01	9.82±0.11	ξ=0.5	9.86±0.07	ξ=0.5	**9.73±0.10**
	ξ=0.001	9.84±0.14	ξ=1	9.84±0.12	ξ=1	9.84±0.16
	ξ=0.0001	**9.73±0.12**	ξ=2	**9.78±0.12**	ξ=2	9.83±0.15

Table 52: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 3$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
inflow	ξ=0	16.93±0.39	ξ=0	16.93±0.39	ξ=0	16.93±0.39
	ξ=0.01	17.04±1.15	ξ=0.5	17.22±0.89	ξ=0.5	**16.78±0.19**
	ξ=0.001	**16.47±0.31**	ξ=1	**16.55±0.34**	ξ=1	17.42±0.77
	ξ=0.0001	**16.73±0.56**	ξ=2	16.89±0.26	ξ=2	17.70±1.59
outflow	ξ=0	17.29±0.4	ξ=0	17.29±0.4	ξ=0	17.29±0.4
	ξ=0.01	17.34±0.38	ξ=0.5	17.81±0.68	ξ=0.5	17.60±0.78
	ξ=0.001	**16.94±0.12**	ξ=1	17.79±1.17	ξ=1	18.00±1.39
	ξ=0.0001	17.89±1.20	ξ=2	**17.26±0.65**	ξ=2	**17.23±0.56**

Table 53: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 3$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
inflow	ξ=0	12.22±0.06	ξ=0	12.22±0.06	ξ=0	12.22±0.06
	ξ=0.01	**12.03±0.14**	ξ=0.5	**12.12±0.06**	ξ=0.5	**12.21±0.03**
	ξ=0.001	**12.16±0.12**	ξ=1	**12.11±0.16**	ξ=1	12.33±0.14
	ξ=0.0001	**12.13±0.07**	ξ=2	**12.12±0.14**	ξ=2	**12.10±0.08**
outflow	ξ=0	9.84±0.07	ξ=0	9.84±0.07	ξ=0	9.84±0.07
	ξ=0.01	**9.77±0.11**	ξ=0.5	**9.76±0.07**	ξ=0.5	9.83±0.12
	ξ=0.001	9.86±0.13	ξ=1	**9.75±0.04**	ξ=1	9.92±0.13
	ξ=0.0001	**9.77±0.03**	ξ=2	**9.77±0.08**	ξ=2	**9.77±0.06**

Table 54: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 3$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln{(t-t'+1)}}$	
INFLOW	ξ=0	16.95±0.32	ξ=0	16.95±0.32	ξ=0	16.95±0.32
	ξ=0.01	**16.69±0.37**	ξ=0.5	17.07±0.34	ξ=0.5	16.95±0.34
	ξ=0.001	**16.73±0.37**	ξ=1	17.04±0.51	ξ=1	18.11±0.33
	ξ=0.0001	**16.63±0.39**	ξ=2	**16.89±0.48**	ξ=2	17.04±0.37
OUTFLOW	ξ=0	18.43±1.11	ξ=0	18.43±1.11	ξ=0	18.43±1.11
	ξ=0.01	**17.08±0.47**	ξ=0.5	**18.20±0.53**	ξ=0.5	**17.17±0.28**
	ξ=0.001	**17.52±0.66**	ξ=1	**17.90±0.84**	ξ=1	18.85±1.16
	ξ=0.0001	**17.28±0.60**	ξ=2	**17.72±0.46**	ξ=2	**17.91±0.72**

Table 55: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 3$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln{(t-t'+1)}}$	
INFLOW	ξ=0	12.18±0.17	ξ=0	12.18±0.17	ξ=0	12.18±0.17
	ξ=0.01	**12.14±0.13**	ξ=0.5	**12.12±0.08**	ξ=0.5	**12.17±0.05**
	ξ=0.001	**12.15±0.15**	ξ=1	**12.14±0.08**	ξ=1	**12.16±0.12**
	ξ=0.0001	**12.15±0.12**	ξ=2	12.26±0.11	ξ=2	12.20±0.08
OUTFLOW	ξ=0	9.82±0.13	ξ=0	9.82±0.13	ξ=0	9.82±0.13
	ξ=0.01	**9.74±0.12**	ξ=0.5	9.87±0.05	ξ=0.5	9.82±0.07
	ξ=0.001	9.85±0.15	ξ=1	**9.81±0.16**	ξ=1	**9.80±0.12**
	ξ=0.0001	**9.81±0.10**	ξ=2	**9.77±0.10**	ξ=2	**9.72±0.08**

Table 56: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 3$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	16.90±0.79	ξ=0	16.9±0.79	ξ=0	16.9±0.79
	ξ=0.01	17.54±0.77	ξ=0.5	**16.76±0.40**	ξ=0.5	**16.81±0.26**
	ξ=0.001	**16.75±0.28**	ξ=1	**16.89±0.43**	ξ=1	17.08±0.64
	ξ=0.0001	**16.90±0.60**	ξ=2	17.37±1.09	ξ=2	**16.68±0.54**
OUTFLOW	ξ=0	17.24±0.69	ξ=0	17.24±0.69	ξ=0	17.24±0.69
	ξ=0.01	18.05±0.88	ξ=0.5	17.62±0.48	ξ=0.5	**16.95±0.21**
	ξ=0.001	17.60±0.48	ξ=1	17.39±0.48	ξ=1	17.44±0.38
	ξ=0.0001	17.57±0.80	ξ=2	18.41±1.07	ξ=2	17.61±0.64

Table 57: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 4$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	12.08±0.07	ξ=0	12.08±0.07	ξ=0	12.08±0.07
	ξ=0.01	**12.08±0.07**	ξ=0.5	12.13±0.05	ξ=0.5	12.33±0.44
	ξ=0.001	12.23±0.15	ξ=1	12.16±0.14	ξ=1	12.13±0.14
	ξ=0.0001	12.08±0.05	ξ=2	12.18±0.13	ξ=2	12.16±0.13
OUTFLOW	ξ=0	9.74±0.09	ξ=0	9.74±0.09	ξ=0	9.74±0.09
	ξ=0.01	**9.73±0.05**	ξ=0.5	9.81±0.07	ξ=0.5	9.91±0.23
	ξ=0.001	9.88±0.17	ξ=1	9.82±0.10	ξ=1	9.79±0.10
	ξ=0.0001	**9.70±0.07**	ξ=2	9.80±0.07	ξ=2	9.79±0.13

Table 58: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 4$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	17.20±0.69	ξ=0	17.20±0.69	ξ=0	17.20±0.69
	ξ=0.01	**17.03±0.38**	ξ=0.5	**16.71±0.45**	ξ=0.5	**16.75±0.42**
	ξ=0.001	17.54±1.31	ξ=1	**17.00±0.89**	ξ=1	**17.11±0.70**
	ξ=0.0001	**16.77±0.42**	ξ=2	**16.73±0.55**	ξ=2	**16.89±0.61**
OUTFLOW	ξ=0	17.65±1.29	ξ=0	17.65±1.29	ξ=0	17.65±1.29
	ξ=0.01	17.58±0.99	ξ=0.5	17.71±0.94	ξ=0.5	17.50±0.62
	ξ=0.001	17.90±1.02	ξ=1	18.09±0.93	ξ=1	17.74±1.22
	ξ=0.0001	17.00±0.27	ξ=2	16.95±0.23	ξ=2	17.25±0.75

Table 59: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 4$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	12.08±0.14	ξ=0	12.08±0.14	ξ=0	12.08±0.14
	ξ=0.01	**12.07±0.05**	ξ=0.5	12.10±0.11	ξ=0.5	12.14±0.01
	ξ=0.001	12.17±0.10	ξ=1	12.09±0.15	ξ=1	12.22±0.15
	ξ=0.0001	12.09±0.12	ξ=2	12.19±0.12	ξ=2	12.16±0.13
OUTFLOW	ξ=0	9.76±0.07	ξ=0	9.76±0.07	ξ=0	9.76±0.07
	ξ=0.01	**9.73±0.07**	ξ=0.5	9.81±0.08	ξ=0.5	**9.71±0.08**
	ξ=0.001	9.76±0.16	ξ=1	**9.70±0.11**	ξ=1	9.83±0.07
	ξ=0.0001	9.77±0.09	ξ=2	**9.72±0.08**	ξ=2	9.87±0.05

Table 60: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 4$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
inflow	ξ=0	16.68±0.47	ξ=0	16.68±0.47	ξ=0	16.68±0.47
	ξ=0.01	16.72±0.13	ξ=0.5	17.22±0.46	ξ=0.5	**16.65±0.16**
	ξ=0.001	17.62±1.03	ξ=1	17.16±0.79	ξ=1	17.14±0.49
	ξ=0.0001	**16.64±0.36**	ξ=2	16.91±0.36	ξ=2	**16.56±0.13**
outflow	ξ=0	17.59±0.93	ξ=0	17.59±0.93	ξ=0	17.59±0.93
	ξ=0.01	**17.11±0.55**	ξ=0.5	18.19±1.11	ξ=0.5	**17.56±0.74**
	ξ=0.001	**17.71±0.51**	ξ=1	17.77±1.46	ξ=1	18.48±1.45
	ξ=0.0001	**17.31±0.48**	ξ=2	**17.59±0.59**	ξ=2	**17.42±0.42**

Table 61: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K = 4$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
inflow	ξ=0	12.13±0.14	ξ=0	12.13±0.14	ξ=0	12.13±0.14
	ξ=0.01	12.20±0.12	ξ=0.5	12.19±0.14	ξ=0.5	12.15±0.14
	ξ=0.001	12.17±0.07	ξ=1	**12.11±0.17**	ξ=1	12.23±0.09
	ξ=0.0001	12.13±0.06	ξ=2	12.16±0.15	ξ=2	**12.10±0.05**
outflow	ξ=0	9.73±0.06	ξ=0	9.73±0.06	ξ=0	9.73±0.06
	ξ=0.01	9.90±0.17	ξ=0.5	9.85±0.15	ξ=0.5	9.75±0.06
	ξ=0.001	9.83±0.07	ξ=1	9.78±0.12	ξ=1	9.82±0.09
	ξ=0.0001	9.75±0.07	ξ=2	9.74±0.05	ξ=2	9.76±0.08

Table 62: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K=4$, $L=4$).

Type	$\alpha_{t'}=\exp(-\xi(t-t'))$		$\alpha_{t'}=\frac{1}{(t-t')^{\xi}}$		$\alpha_{t'}=\frac{1}{\xi\ln(t-t'+1)}$	
INFLOW	ξ=0	16.8±0.32	ξ=0	16.8±0.32	ξ=0	16.8±0.32
	ξ=0.01	**16.58±0.19**	ξ=0.5	**16.53±0.29**	ξ=0.5	17.18±0.48
	ξ=0.001	17.21±0.87	ξ=1	17.72±1.29	ξ=1	17.38±0.60
	ξ=0.0001	16.83±0.26	ξ=2	16.89±0.41	ξ=2	17.01±0.63
OUTFLOW	ξ=0	17.43±0.18	ξ=0	17.43±0.18	ξ=0	17.43±0.18
	ξ=0.01	**17.25±0.31**	ξ=0.5	**17.24±0.48**	ξ=0.5	18.00±1.07
	ξ=0.001	17.70±1.24	ξ=1	18.18±0.90	ξ=1	18.43±0.38
	ξ=0.0001	18.01±0.86	ξ=2	**17.29±0.62**	ξ=2	17.43±0.79

Table 63: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAE. ($K=4$, $L=8$).

Type	$\alpha_{t'}=\exp(-\xi(t-t'))$		$\alpha_{t'}=\frac{1}{(t-t')^{\xi}}$		$\alpha_{t'}=\frac{1}{\xi\ln(t-t'+1)}$	
INFLOW	ξ=0	12.14±0.07	ξ=0	12.14±0.07	ξ=0	12.14±0.07
	ξ=0.01	12.14±0.15	ξ=0.5	12.18±0.14	ξ=0.5	12.16±0.13
	ξ=0.001	12.22±0.13	ξ=1	12.14±0.08	ξ=1	12.17±0.09
	ξ=0.0001	**12.13±0.06**	ξ=2	12.15±0.04	ξ=2	**12.12±0.14**
OUTFLOW	ξ=0	9.78±0.04	ξ=0	9.78±0.04	ξ=0	9.78±0.04
	ξ=0.01	9.82±0.16	ξ=0.5	9.80±0.09	ξ=0.5	9.78±0.10
	ξ=0.001	9.83±0.09	ξ=1	9.84±0.09	ξ=1	9.82±0.14
	ξ=0.0001	**9.73±0.05**	ξ=2	**9.75±0.04**	ξ=2	**9.75±0.08**

Table 64: Comparison of models with and without decay on dataset **NYCTaxi** in terms of MAPE(%). ($K = 4$, $L = 8$).

TYPE	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	17.05±0.5	ξ=0	17.05±0.5	ξ=0	17.05±0.5
	ξ=0.01	**16.87±0.71**	ξ=0.5	**17.00±0.30**	ξ=0.5	**16.58±0.19**
	ξ=0.001	17.35±0.74	ξ=1	**16.77±0.18**	ξ=1	**16.75±0.38**
	ξ=0.0001	**16.32±0.15**	ξ=2	**16.98±0.58**	ξ=2	**16.79±0.50**
OUTFLOW	ξ=0	17.55±0.51	ξ=0	17.55±0.51	ξ=0	17.55±0.51
	ξ=0.01	**17.22±0.42**	ξ=0.5	18.02±0.73	ξ=0.5	**17.53±0.57**
	ξ=0.001	**17.45±0.44**	ξ=1	18.15±0.98	ξ=1	17.70±0.65
	ξ=0.0001	**16.90±0.25**	ξ=2	**17.18±0.54**	ξ=2	17.58±0.47

Table 65: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 1$, $L = 1$).

TYPE	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	5.09±0.02	ξ=0	5.09±0.02	ξ=0	5.09±0.02
	ξ=0.01	**5.06±0.01**	ξ=0.5	**5.03±0.03**	ξ=0.5	**5.07±0.0**
	ξ=0.001	**5.07±0.02**	ξ=1	**5.07±0.04**	ξ=1	**5.07±0.06**
	ξ=0.0001	**5.06±0.02**	ξ=2	**5.06±0.01**	ξ=2	**5.06±0.03**
OUTFLOW	ξ=0	4.73±0.02	ξ=0	4.73±0.02	ξ=0	4.73±0.02
	ξ=0.01	**4.72±0.01**	ξ=0.5	**4.68±0.02**	ξ=0.5	4.76±0.05
	ξ=0.001	**4.71±0.05**	ξ=1	4.75±0.02	ξ=1	**4.72±0.05**
	ξ=0.0001	**4.71±0.05**	ξ=2	4.73±0.02	ξ=2	4.73±0.04

Table 66: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 1$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t - t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	23.05±0.30	ξ=0	23.05±0.30	ξ=0	23.05±0.30
	ξ=0.01	**22.83±0.29**	ξ=0.5	**22.90±0.23**	ξ=0.5	23.06±0.50
	ξ=0.001	**22.59±0.30**	ξ=1	**23.04±0.70**	ξ=1	**22.86±0.56**
	ξ=0.0001	**22.79±0.29**	ξ=2	**22.95±0.32**	ξ=2	**22.60±0.29**
OUTFLOW	ξ=0	21.73±0.30	ξ=0	21.73±0.30	ξ=0	21.73±0.30
	ξ=0.01	21.96±0.27	ξ=0.5	21.76±0.44	ξ=0.5	**21.67±0.53**
	ξ=0.001	**21.58±0.27**	ξ=1	21.95±0.38	ξ=1	**21.68±0.53**
	ξ=0.0001	**21.60±0.25**	ξ=2	**21.66±0.27**	ξ=2	**21.44±0.46**

Table 67: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 1$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t - t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	5.08±0.02	ξ=0	5.08±0.02	ξ=0	5.08±0.02
	ξ=0.01	**5.08±0.04**	ξ=0.5	**5.06±0.03**	ξ=0.5	5.08±0.03
	ξ=0.001	5.09±0.04	ξ=1	**5.05±0.02**	ξ=1	**5.05±0.01**
	ξ=0.0001	**5.07±0.03**	ξ=2	**5.08±0.05**	ξ=2	5.15±0.06
OUTFLOW	ξ=0	4.71±0.03	ξ=0	4.71±0.03	ξ=0	4.71±0.03
	ξ=0.01	**4.71±0.05**	ξ=0.5	4.74±0.04	ξ=0.5	4.75±0.04
	ξ=0.001	4.73±0.07	ξ=1	**4.70±0.03**	ξ=1	4.72±0.02
	ξ=0.0001	**4.71±0.03**	ξ=2	4.75±0.04	ξ=2	4.79±0.05

Table 68: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 1$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	23.21±0.56	ξ=0	23.21±0.56	ξ=0	23.21±0.56
	ξ=0.01	**23.09±0.51**	ξ=0.5	**22.63±0.24**	ξ=0.5	23.51±0.53
	ξ=0.001	**22.80±0.42**	ξ=1	**22.56±0.42**	ξ=1	**23.19±0.17**
	ξ=0.0001	**22.76±0.58**	ξ=2	**22.67±0.40**	ξ=2	23.53±0.90
OUTFLOW	ξ=0	22.05±0.32	ξ=0	22.05±0.32	ξ=0	22.05±0.32
	ξ=0.01	**21.70±0.43**	ξ=0.5	**21.78±0.21**	ξ=0.5	22.43±0.67
	ξ=0.001	**21.74±0.25**	ξ=1	**21.52±0.35**	ξ=1	**21.86±0.44**
	ξ=0.0001	**21.56±0.43**	ξ=2	**21.67±0.47**	ξ=2	22.28±0.68

Table 69: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 1$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	5.11±0.02	ξ=0	5.11±0.02	ξ=0	5.11±0.02
	ξ=0.01	**5.10±0.04**	ξ=0.5	**5.08±0.03**	ξ=0.5	**5.09±0.03**
	ξ=0.001	**5.08±0.03**	ξ=1	**5.05±0.04**	ξ=1	**5.09±0.05**
	ξ=0.0001	**5.08±0.01**	ξ=2	**5.07±0.02**	ξ=2	**5.07±0.03**
OUTFLOW	ξ=0	4.75±0.01	ξ=0	4.75±0.01	ξ=0	4.75±0.01
	ξ=0.01	4.76±0.01	ξ=0.5	**4.70±0.05**	ξ=0.5	**4.74±0.05**
	ξ=0.001	**4.75±0.05**	ξ=1	**4.73±0.02**	ξ=1	4.76±0.06
	ξ=0.0001	**4.73±0.02**	ξ=2	**4.73±0.03**	ξ=2	**4.74±0.03**

Table 70: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 1$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	23.01±0.30	ξ=0	23.01±0.30	ξ=0	23.01±0.30
	ξ=0.01	23.26±0.77	ξ=0.5	23.09±0.37	ξ=0.5	23.22±0.56
	ξ=0.001	**22.70±0.68**	ξ=1	**22.84±0.35**	ξ=1	23.42±0.64
	ξ=0.0001	**22.59±0.52**	ξ=2	**22.74±0.35**	ξ=2	23.53±0.51
OUTFLOW	ξ=0	21.57±0.74	ξ=0	21.57±0.74	ξ=0	21.57±0.74
	ξ=0.01	21.92±0.66	ξ=0.5	21.67±0.31	ξ=0.5	21.77±0.73
	ξ=0.001	22.08±1.11	ξ=1	22.14±0.48	ξ=1	22.09±0.51
	ξ=0.0001	21.91±0.55	ξ=2	21.75±0.47	ξ=2	22.24±0.56

Table 71: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 1$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	5.09±0.02	ξ=0	5.09±0.02	ξ=0	5.09±0.02
	ξ=0.01	**5.08±0.03**	ξ=0.5	**5.06±0.05**	ξ=0.5	5.10±0.03
	ξ=0.001	**5.08±0.02**	ξ=1	**5.06±0.03**	ξ=1	**5.07±0.01**
	ξ=0.0001	**5.05±0.03**	ξ=2	5.09±0.03	ξ=2	**5.08±0.03**
OUTFLOW	ξ=0	4.75±0.03	ξ=0	4.75±0.03	ξ=0	4.75±0.03
	ξ=0.01	**4.74±0.03**	ξ=0.5	**4.70±0.03**	ξ=0.5	**4.75±0.02**
	ξ=0.001	**4.74±0.02**	ξ=1	**4.72±0.04**	ξ=1	**4.72±0.03**
	ξ=0.0001	**4.70±0.03**	ξ=2	4.76±0.02	ξ=2	**4.74±0.04**

Table 72: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 1$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	23.11±0.26	ξ=0	23.11±0.26	ξ=0	23.11±0.26
	ξ=0.01	**22.91±0.48**	ξ=0.5	**22.82±0.34**	ξ=0.5	23.32±0.44
	ξ=0.001	**22.61±0.50**	ξ=1	**22.85±0.27**	ξ=1	23.12±0.34
	ξ=0.0001	**22.74±0.43**	ξ=2	**23.07±0.50**	ξ=2	**23.03±0.42**
outflow	ξ=0	21.74±0.35	ξ=0	21.74±0.35	ξ=0	21.74±0.35
	ξ=0.01	22.09±0.30	ξ=0.5	**21.46±0.20**	ξ=0.5	22.05±0.54
	ξ=0.001	21.76±0.32	ξ=1	**21.66±0.43**	ξ=1	21.99±0.38
	ξ=0.0001	**21.60±0.50**	ξ=2	21.88±0.46	ξ=2	21.88±0.47

Table 73: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 2$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	5.08±0.03	ξ=0	5.08±0.03	ξ=0	5.08±0.03
	ξ=0.01	**5.08±0.02**	ξ=0.5	**5.05±0.03**	ξ=0.5	**5.04±0.01**
	ξ=0.001	5.09±0.01	ξ=1	5.09±0.07	ξ=1	5.10±0.03
	ξ=0.0001	**5.06±0.03**	ξ=2	**5.07±0.02**	ξ=2	5.11±0.06
outflow	ξ=0	4.73±0.04	ξ=0	4.73±0.04	ξ=0	4.73±0.04
	ξ=0.01	**4.73±0.05**	ξ=0.5	**4.69±0.02**	ξ=0.5	**4.70±0.03**
	ξ=0.001	4.76±0.03	ξ=1	4.74±0.03	ξ=1	4.74±0.04
	ξ=0.0001	**4.70±0.06**	ξ=2	4.77±0.04	ξ=2	**4.73±0.04**

Table 74: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 2$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	22.85±0.34	ξ=0	22.85±0.34	ξ=0	22.85±0.34
	ξ=0.01	22.89±0.45	ξ=0.5	**22.74±0.34**	ξ=0.5	23.00±0.28
	ξ=0.001	**22.37±0.31**	ξ=1	22.88±0.30	ξ=1	23.37±0.68
	ξ=0.0001	**22.71±0.34**	ξ=2	22.87±0.75	ξ=2	22.97±0.61
OUTFLOW	ξ=0	21.77±0.46	ξ=0	21.77±0.46	ξ=0	21.77±0.46
	ξ=0.01	**21.67±0.26**	ξ=0.5	**21.72±0.25**	ξ=0.5	21.95±0.62
	ξ=0.001	**21.58±0.24**	ξ=1	21.98±0.47	ξ=1	21.92±0.76
	ξ=0.0001	**21.72±0.6**4	ξ=2	21.80±0.61	ξ=2	**21.74±0.42**

Table 75: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 2$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	5.05±0.01	ξ=0	5.05±0.01	ξ=0	5.05±0.01
	ξ=0.01	5.13±0.05	ξ=0.5	5.09±0.06	ξ=0.5	5.06±0.02
	ξ=0.001	5.06±0.02	ξ=1	**5.03±0.02**	ξ=1	5.09±0.03
	ξ=0.0001	5.07±0.03	ξ=2	5.06±0.04	ξ=2	5.10±0.03
OUTFLOW	ξ=0	4.71±0.01	ξ=0	4.71±0.01	ξ=0	4.71±0.01
	ξ=0.01	4.75±0.03	ξ=0.5	**4.681±0.04**	ξ=0.5	4.71±0.03
	ξ=0.001	4.73±0.04	ξ=1	4.72±0.03	ξ=1	4.74±0.05
	ξ=0.0001	**4.68±0.02**	ξ=2	4.73±0.04	ξ=2	4.75±0.06

Table 76: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 2$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	22.61±0.16	ξ=0	22.61±0.16	ξ=0	22.61±0.16
	ξ=0.01	22.97±0.70	ξ=0.5	23.08±0.48	ξ=0.5	23.03±0.55
	ξ=0.001	22.99±0.46	ξ=1	22.82±0.30	ξ=1	23.04±0.57
	ξ=0.0001	22.68±0.50	ξ=2	23.08±0.59	ξ=2	23.18±0.31
outflow	ξ=0	21.60±0.28	ξ=0	21.60±0.28	ξ=0	21.60±0.28
	ξ=0.01	21.82±0.37	ξ=0.5	**21.48±0.18**	ξ=0.5	21.62±0.60
	ξ=0.001	21.83±0.53	ξ=1	21.84±0.41	ξ=1	22.16±0.61
	ξ=0.0001	**21.44±0.53**	ξ=2	21.93±0.46	ξ=2	21.87±0.56

Table 77: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 2$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	5.12±0.03	ξ=0	5.12±0.03	ξ=0	5.12±0.03
	ξ=0.01	**5.08±0.02**	ξ=0.5	**5.06±0.03**	ξ=0.5	**5.07±0.04**
	ξ=0.001	**5.11±0.04**	ξ=1	**5.07±0.05**	ξ=1	**5.07±0.02**
	ξ=0.0001	**5.07±0.02**	ξ=2	**5.09±0.05**	ξ=2	**5.11±0.04**
outflow	ξ=0	4.75±0.04	ξ=0	4.75±0.04	ξ=0	4.75±0.04
	ξ=0.01	**4.71±0.03**	ξ=0.5	**4.69±0.03**	ξ=0.5	**4.74±0.02**
	ξ=0.001	**4.74±0.02**	ξ=1	**4.73±0.04**	ξ=1	**4.75±0.02**
	ξ=0.0001	**4.70±0.03**	ξ=2	**4.75±0.05**	ξ=2	4.78±0.06

Table 78: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 2$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	23.08±0.48	ξ=0	23.08±0.48	ξ=0	23.08±0.48
	ξ=0.01	**22.98±0.40**	ξ=0.5	**22.78±0.33**	ξ=0.5	**23.06±0.33**
	ξ=0.001	**23.06±0.24**	ξ=1	**23.07±0.36**	ξ=1	**22.90±0.42**
	ξ=0.0001	**22.72±0.24**	ξ=2	23.25±0.55	ξ=2	23.45±0.76
outflow	ξ=0	21.80±0.21	ξ=0	21.80±0.21	ξ=0	21.80±0.21
	ξ=0.01	**21.68±0.24**	ξ=0.5	**21.43±0.27**	ξ=0.5	**21.53±0.39**
	ξ=0.001	22.05±0.46	ξ=1	21.96±0.42	ξ=1	21.82±0.39
	ξ=0.0001	**21.62±0.25**	ξ=2	21.81±0.38	ξ=2	22.24±0.77

Table 79: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 2$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	5.07±0.01	ξ=0	5.07±0.01	ξ=0	5.07±0.01
	ξ=0.01	5.07±0.03	ξ=0.5	5.07±0.07	ξ=0.5	5.09±0.04
	ξ=0.001	5.05±0.02	ξ=1	**5.04±0.03**	ξ=1	5.08±0.02
	ξ=0.0001	5.06±0.02	ξ=2	5.12±0.03	ξ=2	5.17±0.06
outflow	ξ=0	4.72±0.01	ξ=0	4.72±0.01	ξ=0	4.72±0.01
	ξ=0.01	4.73±0.04	ξ=0.5	**4.70±0.0**	ξ=0.5	4.74±0.02
	ξ=0.001	**4.71±0.03**	ξ=1	**4.69±0.03**	ξ=1	4.73±0.04
	ξ=0.0001	**4.70±0.03**	ξ=2	4.77±0.03	ξ=2	4.84±0.05

Table 80: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K=2$, $L=8$).

Type	$\alpha_{t'}=\exp(-\xi(t-t'))$		$\alpha_{t'}=\frac{1}{(t-t')^{\xi}}$		$\alpha_{t'}=\frac{1}{\xi\ln(t-t'+1)}$	
INFLOW	ξ=0	22.82±0.37	ξ=0	22.82±0.37	ξ=0	22.82±0.37
	ξ=0.01	23.02±0.42	ξ=0.5	**22.65±0.35**	ξ=0.5	23.08±0.43
	ξ=0.001	**22.51±0.29**	ξ=1	23.10±0.23	ξ=1	23.55±0.37
	ξ=0.0001	23.00±0.31	ξ=2	23.04±0.34	ξ=2	23.45±0.51
OUTFLOW	ξ=0	21.92±0.28	ξ=0	21.92±0.28	ξ=0	21.92±0.28
	ξ=0.01	**21.80±0.53**	ξ=0.5	**21.50±0.43**	ξ=0.5	22.11±0.40
	ξ=0.001	**21.41±0.34**	ξ=1	22.07±0.42	ξ=1	21.96±0.43
	ξ=0.0001	**21.57±0.28**	ξ=2	22.19±0.66	ξ=2	22.59±0.33

Table 81: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K=3$, $L=1$).

Type	$\alpha_{t'}=\exp(-\xi(t-t'))$		$\alpha_{t'}=\frac{1}{(t-t')^{\xi}}$		$\alpha_{t'}=\frac{1}{\xi\ln(t-t'+1)}$	
INFLOW	ξ=0	5.05±0.01	ξ=0	5.05±0.01	ξ=0	5.05±0.01
	ξ=0.01	5.08±0.02	ξ=0.5	5.09±0.03	ξ=0.5	5.07±0.04
	ξ=0.001	5.07±0.03	ξ=1	5.06±0.05	ξ=1	5.09±0.01
	ξ=0.0001	5.07±0.05	ξ=2	5.07±0.04	ξ=2	5.07±0.01
OUTFLOW	ξ=0	4.69±0.02	ξ=0	4.69±0.02	ξ=0	4.69±0.02
	ξ=0.01	4.74±0.01	ξ=0.5	4.70±0.01	ξ=0.5	4.74±0.03
	ξ=0.001	4.73±0.03	ξ=1	4.69±0.02	ξ=1	4.7±0.03
	ξ=0.0001	4.70±0.05	ξ=2	4.74±0.02	ξ=2	4.72±0.02

Table 82: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 3$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	22.93±0.34	ξ=0	22.93±0.34	ξ=0	22.93±0.34
	ξ=0.01	23.25±0.70	ξ=0.5	22.93±0.57	ξ=0.5	23.20±0.48
	ξ=0.001	**22.88±0.39**	ξ=1	23.11±0.77	ξ=1	**22.88±0.61**
	ξ=0.0001	**22.84±0.22**	ξ=2	23.03±0.77	ξ=2	**22.86±0.35**
outflow	ξ=0	21.73±0.23	ξ=0	21.73±0.23	ξ=0	21.73±0.23
	ξ=0.01	22.20±0.27	ξ=0.5	**21.51±0.43**	ξ=0.5	21.93±0.62
	ξ=0.001	21.96±0.37	ξ=1	22.01±0.39	ξ=1	21.80±0.74
	ξ=0.0001	21.99±0.24	ξ=2	**21.65±0.30**	ξ=2	**21.65±0.57**

Table 83: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 3$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	5.08±0.03	ξ=0	5.08±0.03	ξ=0	5.08±0.03
	ξ=0.01	5.09±0.04	ξ=0.5	**5.06±0.03**	ξ=0.5	**5.06±0.02**
	ξ=0.001	5.09±0.02	ξ=1	5.08±0.03	ξ=1	**5.06±0.01**
	ξ=0.0001	**5.08±0.03**	ξ=2	5.09±0.04	ξ=2	5.09±0.05
outflow	ξ=0	4.70±0.02	ξ=0	4.70±0.02	ξ=0	4.70±0.02
	ξ=0.01	4.71±0.04	ξ=0.5	**4.68±0.02**	ξ=0.5	4.71±0.01
	ξ=0.001	4.75±0.06	ξ=1	4.74±0.02	ξ=1	4.70±0.03
	ξ=0.0001	**4.68±0.02**	ξ=2	4.77±0.03	ξ=2	4.77±0.05

Table 84: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 3$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	22.78±0.16	ξ=0	22.78±0.16	ξ=0	22.78±0.16
	ξ=0.01	23.28±0.50	ξ=0.5	23.06±0.23	ξ=0.5	23.38±0.53
	ξ=0.001	23.08±0.52	ξ=1	22.96±0.51	ξ=1	**22.67±0.38**
	ξ=0.0001	**22.51±0.12**	ξ=2	23.28±0.37	ξ=2	23.06±0.26
outflow	ξ=0	21.62±0.28	ξ=0	21.62±0.28	ξ=0	21.62±0.28
	ξ=0.01	21.92±0.39	ξ=0.5	21.69±0.46	ξ=0.5	21.90±0.35
	ξ=0.001	21.83±0.48	ξ=1	21.74±0.47	ξ=1	**21.42±0.31**
	ξ=0.0001	**21.36±0.10**	ξ=2	22.02±0.46	ξ=2	22.13±0.55

Table 85: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 3$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	5.07±0.02	ξ=0	5.07±0.02	ξ=0	5.07±0.02
	ξ=0.01	5.10±0.03	ξ=0.5	**5.06±0.02**	ξ=0.5	5.07±0.05
	ξ=0.001	**5.05±0.01**	ξ=1	**5.02±0.04**	ξ=1	5.09±0.04
	ξ=0.0001	5.09±0.02	ξ=2	5.09±0.08	ξ=2	5.15±0.05
outflow	ξ=0	4.70±0.03	ξ=0	4.70±0.03	ξ=0	4.70±0.03
	ξ=0.01	4.75±0.02	ξ=0.5	4.70±0.05	ξ=0.5	4.75±0.05
	ξ=0.001	4.74±0.01	ξ=1	4.70±0.02	ξ=1	4.74±0.05
	ξ=0.0001	4.74±0.0	ξ=2	4.72±0.02	ξ=2	4.83±0.06

Table 86: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 3$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	22.90±0.36	ξ=0	22.90±0.36	ξ=0	22.90±0.36
	ξ=0.01	23.04±0.64	ξ=0.5	**22.80±0.26**	ξ=0.5	23.02±0.33
	ξ=0.001	**22.77±0.20**	ξ=1	23.21±0.63	ξ=1	**22.81±0.19**
	ξ=0.0001	**22.73±0.30**	ξ=2	22.96±0.31	ξ=2	23.32±0.59
OUTFLOW	ξ=0	21.77±0.16	ξ=0	21.77±0.16	ξ=0	21.77±0.16
	ξ=0.01	**21.68±0.49**	ξ=0.5	**21.31±0.32**	ξ=0.5	**21.68±0.44**
	ξ=0.001	**21.69±0.75**	ξ=1	22.01±0.36	ξ=1	21.78±0.66
	ξ=0.0001	**21.67±0.42**	ξ=2	**21.52±0.26**	ξ=2	22.47±0.76

Table 87: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 3$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	5.09±0.03	ξ=0	5.09±0.03	ξ=0	5.09±0.03
	ξ=0.01	5.13±0.07	ξ=0.5	**5.06±0.04**	ξ=0.5	**5.08±0.01**
	ξ=0.001	**5.05±0.06**	ξ=1	**5.07±0.04**	ξ=1	**5.07±0.02**
	ξ=0.0001	**5.06±0.02**	ξ=2	5.10±0.03	ξ=2	5.18±0.08
OUTFLOW	ξ=0	4.74±0.03	ξ=0	4.74±0.03	ξ=0	4.74±0.03
	ξ=0.01	**4.72±0.05**	ξ=0.5	**4.70±0.03**	ξ=0.5	4.76±0.01
	ξ=0.001	**4.70±0.06**	ξ=1	**4.73±0.03**	ξ=1	**4.70±0.01**
	ξ=0.0001	**4.72±0.03**	ξ=2	4.77±0.08	ξ=2	4.86±0.10

Table 88: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 3$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	23.03±0.34	ξ=0	23.03±0.34	ξ=0	23.03±0.34
	ξ=0.01	23.54±0.42	ξ=0.5	23.35±0.46	ξ=0.5	**22.88±0.60**
	ξ=0.001	**23.00**±0.38	ξ=1	23.17±0.41	ξ=1	23.12±0.33
	ξ=0.0001	**22.69**±0.58	ξ=2	23.07±0.52	ξ=2	23.39±0.73
OUTFLOW	ξ=0	21.73±0.32	ξ=0	21.73±0.32	ξ=0	21.73±0.32
	ξ=0.01	22.06±0.36	ξ=0.5	22.06±0.61	ξ=0.5	21.82±0.70
	ξ=0.001	**21.67±0.42**	ξ=1	21.95±0.41	ξ=1	**21.50±0.46**
	ξ=0.0001	21.73±0.44	ξ=2	21.80±0.82	ξ=2	22.27±0.68

Table 89: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 4$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	5.07±0.01	ξ=0	5.07±0.01	ξ=0	5.07±0.01
	ξ=0.01	5.10±0.05	ξ=0.5	5.12±0.08	ξ=0.5	**5.06±0.02**
	ξ=0.001	**5.05±0.03**	ξ=1	**5.06±0.05**	ξ=1	5.10±0.03
	ξ=0.0001	5.07±0.03	ξ=2	**5.07±0.02**	ξ=2	5.07±0.06
OUTFLOW	ξ=0	4.71±0.03	ξ=0	4.71±0.03	ξ=0	4.71±0.03
	ξ=0.01	4.73±0.03	ξ=0.5	**4.71±0.03**	ξ=0.5	4.73±0.05
	ξ=0.001	4.72±0.03	ξ=1	4.73±0.07	ξ=1	4.72±0.03
	ξ=0.0001	4.72±0.04	ξ=2	4.72±0.04	ξ=2	4.73±0.04

Table 90: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 4$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	22.97±0.38	ξ=0	22.97±0.38	ξ=0	22.97±0.38
	ξ=0.01	23.04±0.51	ξ=0.5	23.08±0.61	ξ=0.5	23.20±0.51
	ξ=0.001	**22.78±0.42**	ξ=1	23.02±0.61	ξ=1	23.12±0.46
	ξ=0.0001	**22.68±0.39**	ξ=2	22.97±0.59	ξ=2	**22.74±0.41**
OUTFLOW	ξ=0	21.64±0.33	ξ=0	21.64±0.33	ξ=0	21.64±0.33
	ξ=0.01	**21.52±0.27**	ξ=0.5	**21.48±0.35**	ξ=0.5	22.11±0.56
	ξ=0.001	21.79±0.23	ξ=1	21.79±0.64	ξ=1	21.78±0.43
	ξ=0.0001	**21.44±0.42**	ξ=2	**21.48±0.28**	ξ=2	**21.23±0.27**

Table 91: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 4$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	5.09±0.03	ξ=0	5.09±0.03	ξ=0	5.09±0.03
	ξ=0.01	5.09±0.05	ξ=0.5	**5.07±0.04**	ξ=0.5	**5.06±0.04**
	ξ=0.001	**5.05±0.02**	ξ=1	**5.05±0.03**	ξ=1	5.11±0.04
	ξ=0.0001	**5.07±0.04**	ξ=2	**5.08±0.04**	ξ=2	**5.11±0.02**
OUTFLOW	ξ=0	4.74±0.04	ξ=0	4.74±0.04	ξ=0	4.74±0.04
	ξ=0.01	**4.70±0.02**	ξ=0.5	4.74±0.02	ξ=0.5	**4.71±0.05**
	ξ=0.001	**4.72±0.02**	ξ=1	**4.71±0.03**	ξ=1	**4.73±0.06**
	ξ=0.0001	**4.66±0.02**	ξ=2	4.77±0.04	ξ=2	**4.74±0.02**

Table 92: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 4$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	22.97±0.34	ξ=0	22.97±0.34	ξ=0	22.97±0.34
	ξ=0.01	23.20±0.44	ξ=0.5	23.33±0.45	ξ=0.5	23.31±0.48
	ξ=0.001	23.09±0.41	ξ=1	**22.69±0.40**	ξ=1	23.18±0.28
	ξ=0.0001	**22.49±0.29**	ξ=2	23.19±0.65	ξ=2	23.61±0.47
outflow	ξ=0	21.67±0.33	ξ=0	21.67±0.33	ξ=0	21.67±0.33
	ξ=0.01	21.74±0.52	ξ=0.5	21.95±0.37	ξ=0.5	21.97±0.52
	ξ=0.001	21.98±0.54	ξ=1	21.72±0.56	ξ=1	**21.64±0.24**
	ξ=0.0001	**21.31±0.24**	ξ=2	21.94±0.26	ξ=2	21.85±0.35

Table 93: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 4$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	5.07±0.03	ξ=0	5.07±0.03	ξ=0	5.07±0.03
	ξ=0.01	5.08±0.05	ξ=0.5	5.08±0.03	ξ=0.5	**5.06±0.03**
	ξ=0.001	5.10±0.11	ξ=1	**5.06±0.04**	ξ=1	5.09±0.04
	ξ=0.0001	5.07±0.04	ξ=2	5.08±0.02	ξ=2	5.11±0.04
outflow	ξ=0	4.73±0.03	ξ=0	4.73±0.03	ξ=0	4.73±0.03
	ξ=0.01	**4.72±0.05**	ξ=0.5	**4.72±0.03**	ξ=0.5	**4.69±0.03**
	ξ=0.001	**4.73±0.09**	ξ=1	**4.73±0.02**	ξ=1	**4.72±0.04**
	ξ=0.0001	**4.71±0.01**	ξ=2	4.76±0.05	ξ=2	4.78±0.05

Table 94: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 4$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln{(t-t'+1)}}$	
inflow	ξ=0	22.92±0.34	ξ=0	22.92±0.34	ξ=0	22.92±0.34
	ξ=0.01	23.30±0.49	ξ=0.5	23.35±1.08	ξ=0.5	**22.87±0.30**
	ξ=0.001	23.09±0.38	ξ=1	23.19±0.45	ξ=1	23.05±0.52
	ξ=0.0001	**22.74±0.25**	ξ=2	23.18±0.33	ξ=2	23.40±1.00
outflow	ξ=0	21.84±0.36	ξ=0	21.84±0.36	ξ=0	21.84±0.36
	ξ=0.01	**21.82±0.15**	ξ=0.5	21.98±0.67	ξ=0.5	**21.67±0.29**
	ξ=0.001	**21.76±0.58**	ξ=1	22.07±0.64	ξ=1	**21.59±0.39**
	ξ=0.0001	**21.30±0.21**	ξ=2	22.14±0.69	ξ=2	22.41±0.99

Table 95: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAE. ($K = 4$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln{(t-t'+1)}}$	
inflow	ξ=0	5.08±02	ξ=0	5.08±02	ξ=0	5.08±02
	ξ=0.01	5.10±0.04	ξ=0.5	**5.06±0.04**	ξ=0.5	**5.07±0.05**
	ξ=0.001	5.09±0.0338	ξ=1	**5.07±0.05**	ξ=1	**5.06±0.03**
	ξ=0.0001	**5.08±0.05**	ξ=2	5.09±0.03	ξ=2	5.14±0.06
outflow	ξ=0	4.71±0.04	ξ=0	4.71±0.04	ξ=0	4.7169±0.04
	ξ=0.01	4.73±0.01	ξ=0.5	**4.70±0.03**	ξ=0.5	4.72±0.05
	ξ=0.001	4.75±0.03	ξ=1	4.75±0.04	ξ=1	4.75±0.04
	ξ=0.0001	4.71±0.04	ξ=2	4.75±0.03	ξ=2	4.82±0.10

Table 96: Comparison of models with and without decay on dataset **NYCBike2** in terms of MAPE(%). ($K = 4$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	23.18±0.35	ξ=0	23.18±0.35	ξ=0	23.18±0.35
	ξ=0.01	23.55±0.54	ξ=0.5	23.27±0.62	ξ=0.5	**22.94±0.53**
	ξ=0.001	**22.82±0.27**	ξ=1	23.32±0.84	ξ=1	23.38±0.37
	ξ=0.0001	**22.63±0.47**	ξ=2	**23.14±0.56**	ξ=2	24.04±0.69
OUTFLOW	ξ=0	21.97±0.48	ξ=0	21.97±0.48	ξ=0	21.97±0.48
	ξ=0.01	22.21±0.49	ξ=0.5	**21.67±0.32**	ξ=0.5	**21.62±0.31**
	ξ=0.001	**21.91±0.48**	ξ=1	**21.96±0.79**	ξ=1	22.16±0.57
	ξ=0.0001	**21.52±0.47**	ξ=2	22.20±0.69	ξ=2	23.06±1.23

Table 97: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 1$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	11.31±0.03	ξ=0	11.31±0.03	ξ=0	11.31±0.03
	ξ=0.01	**11.28±0.05**	ξ=0.5	**11.28±0.02**	ξ=0.5	11.34±0.06
	ξ=0.001	11.34±0.14	ξ=1	**11.30±0.08**	ξ=1	11.34±0.08
	ξ=0.0001	**11.26±0.04**	ξ=2	11.40±0.09	ξ=2	11.49±0.13
OUTFLOW	ξ=0	11.40±0.03	ξ=0	11.40±0.03	ξ=0	11.40±0.03
	ξ=0.01	**11.37±0.04**	ξ=0.5	**11.37±0.02**	ξ=0.5	11.43±0.06
	ξ=0.001	11.43±0.13	ξ=1	**11.39±0.08**	ξ=1	11.43±0.08
	ξ=0.0001	**11.35±0.04**	ξ=2	11.49±0.09	ξ=2	11.58±0.12

Table 98: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 1$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	15.57±0.35	ξ=0	15.57±0.35	ξ=0	15.57±0.35
	ξ=0.01	**15.23±0.48**	ξ=0.5	**15.37±0.32**	ξ=0.5	**15.40±0.39**
	ξ=0.001	**15.37±0.37**	ξ=1	**15.51±0.52**	ξ=1	15.73±0.14
	ξ=0.0001	**15.29±0.31**	ξ=2	15.63±0.46	ξ=2	15.88±0.42
outflow	ξ=0	15.75±0.3	ξ=0	15.75±0.3	ξ=0	15.75±0.3
	ξ=0.01	**15.41±0.52**	ξ=0.5	**15.53±0.32**	ξ=0.5	**15.59±0.42**
	ξ=0.001	**15.52±0.39**	ξ=1	**15.67±0.54**	ξ=1	15.90±0.12
	ξ=0.0001	**15.44±0.30**	ξ=2	15.78±0.46	ξ=2	16.04±0.43

Table 99: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 1$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
inflow	ξ=0	11.35±0.02	ξ=0	11.35±0.02	ξ=0	11.35±0.02
	ξ=0.01	**11.30±0.09**	ξ=0.5	**11.30±0.07**	ξ=0.5	**11.32±0.02**
	ξ=0.001	**11.30±0.04**	ξ=1	**11.31±0.07**	ξ=1	**11.29±0.03**
	ξ=0.0001	**11.29±0.04**	ξ=2	11.40±0.12	ξ=2	11.46±0.20
outflow	ξ=0	11.44±0.02	ξ=0	11.44±0.02	ξ=0	11.44±0.02
	ξ=0.01	**11.39±0.08**	ξ=0.5	**11.39±0.07**	ξ=0.5	**11.40±0.02**
	ξ=0.001	**11.39±0.03**	ξ=1	**11.39±0.07**	ξ=1	**11.37±0.03**
	ξ=0.0001	**11.38±0.04**	ξ=2	11.49±0.11	ξ=2	11.54±0.19

Table 100: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 1$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	15.45±0.37	ξ=0	15.45±0.37	ξ=0	15.45±0.37
	ξ=0.01	**15.28±0.22**	ξ=0.5	15.46±0.40	ξ=0.5	15.47±0.36
	ξ=0.001	**15.03±0.22**	ξ=1	**15.38±0.36**	ξ=1	15.42±0.20
	ξ=0.0001	15.46±0.16	ξ=2	15.56±0.30	ξ=2	15.45±0.23
OUTFLOW	ξ=0	15.60±0.40	ξ=0	15.60±0.40	ξ=0	15.60±0.40
	ξ=0.01	**15.44±0.22**	ξ=0.5	15.65±0.39	ξ=0.5	**15.59±0.34**
	ξ=0.001	**15.15±0.21**	ξ=1	**15.54±0.38**	ξ=1	**15.59±0.20**
	ξ=0.0001	**15.58±0.11**	ξ=2	15.71±0.35	ξ=2	**15.58±0.20**

Table 101: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 1$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	11.27±0.03	ξ=0	11.27±0.03	ξ=0	11.27±0.03
	ξ=0.01	**11.25±0.02**	ξ=0.5	11.29±0.03	ξ=0.5	11.34±0.05
	ξ=0.001	11.30±0.08	ξ=1	11.31±0.04	ξ=1	11.35±0.06
	ξ=0.0001	11.33±0.03	ξ=2	11.31±0.04	ξ=2	11.42±0.07
OUTFLOW	ξ=0	11.36±0.02	ξ=0	11.36±0.02	ξ=0	11.36±0.02
	ξ=0.01	**11.34±0.02**	ξ=0.5	11.38±0.03	ξ=0.5	11.43±0.05
	ξ=0.001	11.39±0.08	ξ=1	11.39±0.04	ξ=1	11.43±0.06
	ξ=0.0001	11.42±0.03	ξ=2	11.40±0.04	ξ=2	11.51±0.07

Table 102: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 1$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	15.08±0.31	ξ=0	15.08±0.31	ξ=0	15.08±0.31
	ξ=0.01	**14.90±0.06**	ξ=0.5	15.31±0.39	ξ=0.5	15.51±0.66
	ξ=0.001	15.53±0.41	ξ=1	15.13±0.18	ξ=1	15.47±0.29
	ξ=0.0001	15.70±0.53	ξ=2	15.50±0.32	ξ=2	15.53±0.24
OUTFLOW	ξ=0	15.21±0.30	ξ=0	15.21±0.30	ξ=0	15.21±0.30
	ξ=0.01	**15.06±0.05**	ξ=0.5	15.47±0.39	ξ=0.5	15.65±0.68
	ξ=0.001	15.65±0.44	ξ=1	15.29±0.19	ξ=1	15.58±0.28
	ξ=0.0001	15.87±0.64	ξ=2	15.66±0.31	ξ=2	15.70±0.29

Table 103: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 1$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	11.27±0.02	ξ=0	11.27±0.02	ξ=0	11.27±0.02
	ξ=0.01	**11.26±0.03**	ξ=0.5	11.27±0.05	ξ=0.5	11.33±0.03
	ξ=0.001	11.33±0.04	ξ=1	11.29±0.05	ξ=1	11.37±0.10
	ξ=0.0001	11.29±0.06	ξ=2	11.34±0.07	ξ=2	11.43±0.05
OUTFLOW	ξ=0	11.36±0.03	ξ=0	11.36±0.03	ξ=0	11.36±0.03
	ξ=0.01	**11.34±0.03**	ξ=0.5	**11.36±0.05**	ξ=0.5	11.42±0.03
	ξ=0.001	11.42±0.04	ξ=1	11.37±0.05	ξ=1	11.45±0.10
	ξ=0.0001	11.38±0.06	ξ=2	11.43±0.07	ξ=2	11.51±0.05

Table 104: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 1$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	15.23±0.25	ξ=0	15.23±0.25	ξ=0	15.23±0.25
	ξ=0.01	**15.10±0.26**	ξ=0.5	**15.21±0.13**	ξ=0.5	15.30±0.46
	ξ=0.001	15.57±0.52	ξ=1	15.59±0.36	ξ=1	15.36±0.19
	ξ=0.0001	15.64±0.53	ξ=2	15.25±0.15	ξ=2	15.56±0.14
OUTFLOW	ξ=0	15.37±0.26	ξ=0	15.37±0.26	ξ=0	15.37±0.26
	ξ=0.01	**15.23±0.21**	ξ=0.5	**15.35±0.13**	ξ=0.5	15.44±0.43
	ξ=0.001	15.74±0.50	ξ=1	15.69±0.38	ξ=1	15.53±0.14
	ξ=0.0001	15.75±0.53	ξ=2	15.40±0.13	ξ=2	15.67±0.16

Table 105: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 2$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	11.31±0.04	ξ=0	11.31±0.04	ξ=0	11.31±0.04
	ξ=0.01	**11.26±0.03**	ξ=0.5	**11.27±0.10**	ξ=0.5	**11.28±0.06**
	ξ=0.001	**11.30±0.06**	ξ=1	**11.30±0.04**	ξ=1	11.31±0.02
	ξ=0.0001	11.31±0.05	ξ=2	11.32±0.08	ξ=2	11.45±0.16
OUTFLOW	ξ=0	11.39±0.05	ξ=0	11.39±0.05	ξ=0	11.3952±0.05
	ξ=0.01	**11.35±0.03**	ξ=0.5	**11.36±0.10**	ξ=0.5	**11.38±0.05**
	ξ=0.001	11.39±0.06	ξ=1	**11.39±0.04**	ξ=1	11.40±0.02
	ξ=0.0001	11.40±0.05	ξ=2	11.41±0.07	ξ=2	11.53±0.16

Table 106: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 2$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	15.46±0.34	ξ=0	15.46±0.34	ξ=0	15.46±0.34
	ξ=0.01	**15.15±0.24**	ξ=0.5	**15.05±0.14**	ξ=0.5	**15.24±0.29**
	ξ=0.001	**15.23±0.33**	ξ=1	15.54±0.53	ξ=1	**15.10±0.13**
	ξ=0.0001	15.56±0.44	ξ=2	**15.25±0.27**	ξ=2	15.52±0.50
OUTFLOW	ξ=0	15.58±0.30	ξ=0	15.58±0.30	ξ=0	15.58±0.30
	ξ=0.01	**15.30±0.27**	ξ=0.5	**15.19±0.15**	ξ=0.5	**15.39±0.30**
	ξ=0.001	**15.41±0.36**	ξ=1	15.69±0.55	ξ=1	**15.25±0.14**
	ξ=0.0001	15.75±0.45	ξ=2	**15.35±0.28**	ξ=2	15.65±0.53

Table 107: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 2$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	11.30±0.05	ξ=0	11.30±0.05	ξ=0	11.30±0.05
	ξ=0.01	**11.24±0.02**	ξ=0.5	**11.28±0.05**	ξ=0.5	**11.26±0.06**
	ξ=0.001	11.30±0.05	ξ=1	11.30±0.04	ξ=1	11.46±0.09
	ξ=0.0001	11.32±0.06	ξ=2	11.31±0.07	ξ=2	11.39±0.04
OUTFLOW	ξ=0	11.38±0.05	ξ=0	11.38±0.05	ξ=0	11.38±0.05
	ξ=0.01	**11.33±0.02**	ξ=0.5	**11.37±0.05**	ξ=0.5	**11.35±0.06**
	ξ=0.001	11.39±0.05	ξ=1	11.39±0.04	ξ=1	11.54±0.08
	ξ=0.0001	11.41±0.05	ξ=2	11.39±0.07	ξ=2	11.47±0.04

Table 108: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 2$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	15.54±0.38	ξ=0	15.54±0.38	ξ=0	15.54±0.38
	ξ=0.01	**15.27±0.30**	ξ=0.5	**15.35±0.32**	ξ=0.5	**15.15±0.23**
	ξ=0.001	**15.44±0.29**	ξ=1	**15.35±0.31**	ξ=1	15.85±0.80
	ξ=0.0001	15.64±0.33	ξ=2	**15.39±0.45**	ξ=2	15.66±0.39
OUTFLOW	ξ=0	15.64±0.37	ξ=0	15.64±0.37	ξ=0	15.64±0.37
	ξ=0.01	**15.42±0.35**	ξ=0.5	**15.52±0.29**	ξ=0.5	**15.32±0.26**
	ξ=0.001	**15.60±0.28**	ξ=1	**15.49±0.28**	ξ=1	16.00±0.75
	ξ=0.0001	15.80±0.35	ξ=2	**15.51±0.46**	ξ=2	15.78±0.42

Table 109: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 2$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	11.2695±0.0363	ξ=0	11.2695±0.0363	ξ=0	11.2695±0.0363
	ξ=0.01	11.27±0.06	ξ=0.5	11.27±0.05	ξ=0.5	11.31±0.05
	ξ=0.001	11.29±0.07	ξ=1	11.32±0.15	ξ=1	11.31±0.04
	ξ=0.0001	11.28±0.07	ξ=2	11.34±0.05	ξ=2	11.45±0.10
OUTFLOW	ξ=0	11.35±0.03	ξ=0	11.35±0.03	ξ=0	11.35±0.03
	ξ=0.01	11.36±0.06	ξ=0.5	11.36±0.05	ξ=0.5	11.39±0.05
	ξ=0.001	11.37±0.07	ξ=1	11.4±0.16	ξ=1	11.41±0.04
	ξ=0.0001	11.37±0.07	ξ=2	11.42±0.04	ξ=2	11.53±0.09

Table 110: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 2$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t - t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	15.54±0.45	ξ=0	15.54±0.45	ξ=0	15.54±0.45
	ξ=0.01	**15.39±0.46**	ξ=0.5	15.62±0.30	ξ=0.5	**15.17±0.15**
	ξ=0.001	**15.32±0.17**	ξ=1	**15.24±0.43**	ξ=1	15.60±0.37
	ξ=0.0001	**15.51±0.48**	ξ=2	**15.41±0.43**	ξ=2	15.71±0.55
OUTFLOW	ξ=0	15.58±0.44	ξ=0	15.58±0.44	ξ=0	15.58±0.44
	ξ=0.01	15.58±0.50	ξ=0.5	15.79±0.31	ξ=0.5	**15.29±0.15**
	ξ=0.001	**15.47±0.18**	ξ=1	**15.50±0.56**	ξ=1	15.78±0.36
	ξ=0.0001	15.68±0.45	ξ=2	**15.52±0.42**	ξ=2	15.80±0.50

Table 111: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 2$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t - t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	11.33±0.09	ξ=0	11.33±0.09	ξ=0	11.33±0.09
	ξ=0.01	**11.26±0.05**	ξ=0.5	**11.23±0.01**	ξ=0.5	**11.28±0.09**
	ξ=0.001	**11.33±0.04**	ξ=1	**11.30±0.07**	ξ=1	**11.31±0.04**
	ξ=0.0001	**11.26±0.06**	ξ=2	**11.30±0.06**	ξ=2	11.47±0.13
OUTFLOW	ξ=0	11.42±0.09	ξ=0	11.42±0.09	ξ=0	11.42±0.09
	ξ=0.01	**11.35±0.04**	ξ=0.5	**11.32±0.01**	ξ=0.5	**11.37±0.09**
	ξ=0.001	**11.42±0.04**	ξ=1	**11.39±0.07**	ξ=1	**11.40±0.04**
	ξ=0.0001	**11.35±0.06**	ξ=2	**11.39±0.06**	ξ=2	11.56±0.13

Table 112: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 2$, $L = 8$).

TYPE	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	15.01±0.13	ξ=0	15.01±0.13	ξ=0	15.01±0.13
	ξ=0.01	15.37±0.20	ξ=0.5	15.18±0.10	ξ=0.5	15.60±0.48
	ξ=0.001	15.77±0.34	ξ=1	15.37±0.45	ξ=1	15.44±0.35
	ξ=0.0001	15.20±0.35	ξ=2	15.50±0.42	ξ=2	15.56±0.45
OUTFLOW	ξ=0	15.15±0.13	ξ=0	15.15±0.13	ξ=0	15.15±0.13
	ξ=0.01	15.56±0.22	ξ=0.5	15.35±0.16	ξ=0.5	15.75±0.41
	ξ=0.001	15.90±0.33	ξ=1	15.51±0.41	ξ=1	15.60±0.30
	ξ=0.0001	15.35±0.33	ξ=2	15.66±0.41	ξ=2	15.73±0.49

Table 113: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 3$, $L = 1$).

TYPE	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	11.30±0.03	ξ=0	11.30±0.03	ξ=0	11.30±0.03
	ξ=0.01	**11.24±0.05**	ξ=0.5	11.31±0.07	ξ=0.5	**11.26±0.02**
	ξ=0.001	**11.27±0.05**	ξ=1	**11.29±0.03**	ξ=1	11.37±0.08
	ξ=0.0001	11.33±0.09	ξ=2	11.34±0.10	ξ=2	11.37±0.04
OUTFLOW	ξ=0	11.38±0.03	ξ=0	11.38±0.03	ξ=0	11.38±0.03
	ξ=0.01	**11.33±0.06**	ξ=0.5	11.39±0.07	ξ=0.5	**11.35±0.02**
	ξ=0.001	**11.36±0.05**	ξ=1	11.38±0.03	ξ=1	11.47±0.08
	ξ=0.0001	11.42±0.09	ξ=2	11.43±0.09	ξ=2	11.46±0.04

Table 114: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 3$, $L = 1$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	15.33±0.25	ξ=0	15.33±0.25	ξ=0	15.33±0.25
	ξ=0.01	**15.18±0.29**	ξ=0.5	15.42±0.47	ξ=0.5	**15.06±0.16**
	ξ=0.001	15.39±0.29	ξ=1	15.48±0.30	ξ=1	15.45±0.28
	ξ=0.0001	15.46±0.50	ξ=2	**15.20±0.13**	ξ=2	15.69±0.45
OUTFLOW	ξ=0	15.41±0.21	ξ=0	15.41±0.21	ξ=0	15.41±0.21
	ξ=0.01	**15.36±0.31**	ξ=0.5	15.53±0.45	ξ=0.5	**15.23±0.18**
	ξ=0.001	15.48±0.28	ξ=1	15.65±0.30	ξ=1	15.62±0.32
	ξ=0.0001	15.63±0.54	ξ=2	**15.31±0.17**	ξ=2	15.82±0.42

Table 115: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 3$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	11.32±0.13	ξ=0	11.32±0.13	ξ=0	11.32±0.13
	ξ=0.01	**11.29±0.07**	ξ=0.5	**11.28±0.03**	ξ=0.5	**11.28±0.03**
	ξ=0.001	**11.28±0.04**	ξ=1	**11.29±0.04**	ξ=1	11.39±0.09
	ξ=0.0001	**11.28±0.05**	ξ=2	11.34±0.06	ξ=2	11.41±0.12
OUTFLOW	ξ=0	11.41±0.13	ξ=0	11.41±0.13	ξ=0	11.41±0.13
	ξ=0.01	**11.37±0.07**	ξ=0.5	**11.37±0.03**	ξ=0.5	**11.37±0.03**
	ξ=0.001	**11.37±0.04**	ξ=1	**11.38±0.04**	ξ=1	11.47±0.10
	ξ=0.0001	**11.37±0.05**	ξ=2	11.43±0.07	ξ=2	11.50±0.12

Table 116: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 3$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	15.36±0.35	ξ=0	15.36±0.35	ξ=0	15.36±0.35
	ξ=0.01	15.39±0.29	ξ=0.5	**15.24±0.19**	ξ=0.5	**15.24±0.29**
	ξ=0.001	**15.30±0.18**	ξ=1	**14.99±0.08**	ξ=1	**15.21±0.40**
	ξ=0.0001	**15.31±0.47**	ξ=2	**15.30±0.38**	ξ=2	15.71±0.37
OUTFLOW	ξ=0	15.50±0.32	ξ=0	15.50±0.32	ξ=0	15.50±0.32
	ξ=0.01	15.56±0.29	ξ=0.5	**15.45±0.19**	ξ=0.5	**15.37±0.31**
	ξ=0.001	**15.42±0.21**	ξ=1	**15.16±0.09**	ξ=1	**15.39±0.47**
	ξ=0.0001	**15.47±0.46**	ξ=2	**15.48±0.47**	ξ=2	15.81±0.37

Table 117: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 3$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	11.27±0.04	ξ=0	11.27±0.04	ξ=0	11.27±0.04
	ξ=0.01	**11.27±0.02**	ξ=0.5	**11.26±0.04**	ξ=0.5	11.34±0.04
	ξ=0.001	11.30±0.05	ξ=1	11.31±0.05	ξ=1	11.35±0.01
	ξ=0.0001	11.30±0.05	ξ=2	11.35±0.05	ξ=2	11.52±0.14
OUTFLOW	ξ=0	11.36±0.05	ξ=0	11.36±0.05	ξ=0	11.36±0.05
	ξ=0.01	**11.35±0.02**	ξ=0.5	**11.35±0.03**	ξ=0.5	11.43±0.04
	ξ=0.001	11.38±0.05	ξ=1	11.40±0.05	ξ=1	11.44±0.01
	ξ=0.0001	11.39±0.05	ξ=2	11.45±0.05	ξ=2	11.60±0.15

Table 118: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 3$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	15.06±0.22	ξ=0	15.06±0.22	ξ=0	15.06±0.22
	ξ=0.01	15.09±0.18	ξ=0.5	15.39±0.45	ξ=0.5	15.42±0.34
	ξ=0.001	**15.06±0.11**	ξ=1	15.45±0.51	ξ=1	15.33±0.19
	ξ=0.0001	15.22±0.26	ξ=2	15.55±0.37	ξ=2	16.04±0.72
OUTFLOW	ξ=0	15.24±0.25	ξ=0	15.24±0.25	ξ=0	15.24±0.25
	ξ=0.01	15.26±0.17	ξ=0.5	15.52±0.36	ξ=0.5	15.58±0.37
	ξ=0.001	**15.21±0.12**	ξ=1	15.61±0.50	ξ=1	15.57±0.35
	ξ=0.0001	15.31±0.21	ξ=2	15.74±0.39	ξ=2	16.21±0.73

Table 119: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 3$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	11.30±0.01	ξ=0	11.30±0.01	ξ=0	11.30±0.01
	ξ=0.01	11.31±0.09	ξ=0.5	**11.26±0.05**	ξ=0.5	**11.27±0.04**
	ξ=0.001	**11.29±0.08**	ξ=1	11.32±0.07	ξ=1	11.35±0.03
	ξ=0.0001	**11.28±0.05**	ξ=2	11.31±0.03	ξ=2	11.47±0.09
OUTFLOW	ξ=0	11.39±0.01	ξ=0	11.39±0.01	ξ=0	11.39±0.01
	ξ=0.01	11.40±0.09	ξ=0.5	**11.35±0.05**	ξ=0.5	**11.36±0.04**
	ξ=0.001	**11.37±0.08**	ξ=1	11.41±0.07	ξ=1	11.44±0.03
	ξ=0.0001	**11.36±0.05**	ξ=2	11.40±0.03	ξ=2	11.56±0.09

Table 120: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 3$, $L = 8$).

TYPE	$\alpha_{t'} = \exp(-\xi(t - t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	15.08±0.23	ξ=0	15.08±0.23	ξ=0	15.08±0.23
	ξ=0.01	15.25±0.18	ξ=0.5	15.33±0.32	ξ=0.5	15.18±0.21
	ξ=0.001	15.17±0.25	ξ=1	15.38±0.23	ξ=1	15.28±0.11
	ξ=0.0001	15.20±0.28	ξ=2	15.84±0.41	ξ=2	15.99±0.46
OUTFLOW	ξ=0	15.23±0.24	ξ=0	15.23±0.24	ξ=0	15.23±0.24
	ξ=0.01	15.43±0.19	ξ=0.5	15.52±0.34	ξ=0.5	15.30±0.20
	ξ=0.001	15.34±0.26	ξ=1	15.55±0.29	ξ=1	15.45±0.09
	ξ=0.0001	15.32±0.27	ξ=2	15.94±0.44	ξ=2	16.15±0.46

Table 121: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 4$, $L = 1$).

TYPE	$\alpha_{t'} = \exp(-\xi(t - t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	11.29±0.04	ξ=0	11.29±0.04	ξ=0	11.29±0.04
	ξ=0.01	11.29±0.03	ξ=0.5	**11.28±0.01**	ξ=0.5	11.32±0.01
	ξ=0.001	11.33±0.07	ξ=1	11.30±0.08	ξ=1	11.39±0.10
	ξ=0.0001	11.36±0.06	ξ=2	11.32±0.11	ξ=2	11.40±0.10
OUTFLOW	ξ=0	11.37±0.04	ξ=0	11.37±0.04	ξ=0	11.37±0.04
	ξ=0.01	11.38±0.03	ξ=0.5	**11.36±0.01**	ξ=0.5	11.40±0.01
	ξ=0.001	11.42±0.07	ξ=1	11.39±0.08	ξ=1	11.48±0.10
	ξ=0.0001	11.45±0.07	ξ=2	11.41±0.10	ξ=2	11.49±0.10

Table 122: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 4$, $L = 1$).

TYPE	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	15.37±0.38	ξ=0	15.37±0.38	ξ=0	15.37±0.38
	ξ=0.01	**15.24±0.39**	ξ=0.5	15.40±0.41	ξ=0.5	**15.25±0.43**
	ξ=0.001	15.81±0.34	ξ=1	**15.32±0.09**	ξ=1	15.42±0.26
	ξ=0.0001	**15.21±0.22**	ξ=2	15.51±0.34	ξ=2	15.50±0.21
OUTFLOW	ξ=0	15.49±0.36	ξ=0	15.49±0.36	ξ=0	15.49±0.36
	ξ=0.01	**15.39±0.38**	ξ=0.5	15.55±0.40	ξ=0.5	**15.37±0.42**
	ξ=0.001	16.03±0.44	ξ=1	**15.48±0.14**	ξ=1	15.67±0.42
	ξ=0.0001	15.38±0.20	ξ=2	15.69±0.36	ξ=2	15.57±0.20

Table 123: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 4$, $L = 2$).

TYPE	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln(t-t'+1)}$	
INFLOW	ξ=0	11.33±0.06	ξ=0	11.33±0.06	ξ=0	11.33±0.06
	ξ=0.01	**11.24±0.10**	ξ=0.5	**11.28±0.03**	ξ=0.5	**11.28±0.02**
	ξ=0.001	**11.29±0.05**	ξ=1	**11.31±0.05**	ξ=1	11.33±0.02
	ξ=0.0001	**11.32±0.08**	ξ=2	11.33±0.06	ξ=2	11.48±0.09
OUTFLOW	ξ=0	11.42±0.05	ξ=0	11.42±0.05	ξ=0	11.42±0.05
	ξ=0.01	**11.34±0.10**	ξ=0.5	**11.37±0.04**	ξ=0.5	**11.37±0.02**
	ξ=0.001	**11.38±0.05**	ξ=1	**11.40±0.05**	ξ=1	11.42±0.03
	ξ=0.0001	**11.41±0.08**	ξ=2	11.42±0.06	ξ=2	11.56±0.09

Table 124: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 4$, $L = 2$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	15.55±0.40	ξ=0	15.55±0.40	ξ=0	15.55±0.40
	ξ=0.01	**15.21±0.24**	ξ=0.5	**15.29±0.31**	ξ=0.5	**15.40±0.32**
	ξ=0.001	**15.43±0.31**	ξ=1	**15.26±0.32**	ξ=1	**15.54±0.44**
	ξ=0.0001	**15.35±0.31**	ξ=2	**15.30±0.22**	ξ=2	15.86±0.37
OUTFLOW	ξ=0	15.55±0.42	ξ=0	15.55±0.42	ξ=0	15.55±0.42
	ξ=0.01	**15.37±0.27**	ξ=0.5	**15.48±0.34**	ξ=0.5	15.57±0.36
	ξ=0.001	15.58±0.29	ξ=1	**15.40±0.33**	ξ=1	15.74±0.49
	ξ=0.0001	**15.50±0.32**	ξ=2	**15.41±0.27**	ξ=2	15.97±0.33

Table 125: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K = 4$, $L = 4$).

Type	$\alpha_{t'} = \exp(-\xi(t-t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
INFLOW	ξ=0	11.30±0.06	ξ=0	11.30±0.06	ξ=0	11.30±0.06
	ξ=0.01	**11.28±0.04**	ξ=0.5	**11.30±0.10**	ξ=0.5	**11.27±0.05**
	ξ=0.001	**11.29±0.06**	ξ=1	11.32±0.10	ξ=1	11.36±0.07
	ξ=0.0001	**11.26±0.04**	ξ=2	11.36±0.02	ξ=2	11.42±0.08
OUTFLOW	ξ=0	11.38±0.06	ξ=0	11.38±0.06	ξ=0	11.38±0.06
	ξ=0.01	**11.37±0.03**	ξ=0.5	**11.38±0.09**	ξ=0.5	**11.36±0.05**
	ξ=0.001	**11.38±0.05**	ξ=1	11.41±0.11	ξ=1	11.45±0.07
	ξ=0.0001	**11.35±0.03**	ξ=2	11.451±0.02	ξ=2	11.51±0.08

Table 126: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K=4$, $L=4$).

TYPE	$\alpha_{t'}=\exp(-\xi(t-t'))$		$\alpha_{t'}=\frac{1}{(t-t')^{\xi}}$		$\alpha_{t'}=\frac{1}{\xi\ln(t-t'+1)}$	
INFLOW	ξ=0	15.21±0.10	ξ=0	15.21±0.10	ξ=0	15.21±0.10
	ξ=0.01	15.55±0.46	ξ=0.5	15.31±0.44	ξ=0.5	15.45±0.46
	ξ=0.001	15.25±0.24	ξ=1	15.25±0.43	ξ=1	15.49±0.09
	ξ=0.0001	15.57±0.44	ξ=2	15.28±0.40	ξ=2	15.61±0.38
OUTFLOW	ξ=0	15.36±0.10	ξ=0	15.36±0.10	ξ=0	15.36±0.10
	ξ=0.01	15.75±0.53	ξ=0.5	15.44±0.41	ξ=0.5	15.63±0.53
	ξ=0.001	15.41±0.26	ξ=1	15.43±0.48	ξ=1	15.69±0.14
	ξ=0.0001	15.71±0.41	ξ=2	15.40±0.36	ξ=2	15.70±0.33

Table 127: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAE. ($K=4$, $L=8$).

TYPE	$\alpha_{t'}=\exp(-\xi(t-t'))$		$\alpha_{t'}=\frac{1}{(t-t')^{\xi}}$		$\alpha_{t'}=\frac{1}{\xi\ln(t-t'+1)}$	
INFLOW	ξ=0	11.29±0.08	ξ=0	11.29±0.08	ξ=0	11.29±0.08
	ξ=0.01	**11.27±0.06**	ξ=0.5	**11.25±0.02**	ξ=0.5	11.29±0.04
	ξ=0.001	**11.28±0.05**	ξ=1	11.37±0.15	ξ=1	11.38±0.05
	ξ=0.0001	**11.27±0.02**	ξ=2	**11.28±0.09**	ξ=2	11.38±0.06
OUTFLOW	ξ=0	11.37±0.08	ξ=0	11.37±0.08	ξ=0	11.37±0.08
	ξ=0.01	**11.36±0.06**	ξ=0.5	**11.33±0.02**	ξ=0.5	11.38±0.04
	ξ=0.001	**11.37±0.05**	ξ=1	11.46±0.16	ξ=1	11.47±0.05
	ξ=0.0001	**11.36±0.02**	ξ=2	**11.37±0.09**	ξ=2	11.46±0.06

Table 128: Comparison of models with and without decay on dataset **BJTaxi** in terms of MAPE(%). ($K = 4$, $L = 8$).

Type	$\alpha_{t'} = \exp(-\xi(t - t'))$		$\alpha_{t'} = \frac{1}{(t-t')^{\xi}}$		$\alpha_{t'} = \frac{1}{\xi \ln (t-t'+1)}$	
inflow	ξ=0	15.55±0.32	ξ=0	15.55±0.32	ξ=0	15.55±0.32
	ξ=0.01	**15.06±0.23**	ξ=0.5	**15.00±0.12**	ξ=0.5	15.69±0.41
	ξ=0.001	**15.17±0.17**	ξ=1	**15.38±0.32**	ξ=1	15.67±0.61
	ξ=0.0001	**15.42±0.46**	ξ=2	**15.36±0.37**	ξ=2	**15.48±0.49**
outflow	ξ=0	15.70±0.27	ξ=0	15.70±0.27	ξ=0	15.70±0.27
	ξ=0.01	**15.26±0.30**	ξ=0.5	**15.16±0.16**	ξ=0.5	15.88±0.45
	ξ=0.001	**15.24±0.12**	ξ=1	**15.48±0.25**	ξ=1	15.85±0.65
	ξ=0.0001	**15.56±0.42**	ξ=2	**15.51±0.44**	ξ=2	**15.62±0.47**