

1 Appendix

2 A Hyperparameter Settings

3 Two key hyperparameters of KnowMTP are the number of selected agents K and the radius of the
4 local region R . We use the grid search method to identify the optimal hyperparameter setting for each
5 KnowMTP-combined model. The range of candidate values for hyperparameters K and R are $\{3, 5,$
6 $10, 20\}$ and $\{5, 10, 20, 30\}$, respectively. Afterward, the optimal hyperparameter setting of a model
7 is selected from exhaustive hyperparameter combinations by comparing the trajectory prediction
8 performance under the different combinations. The final hyperparameter settings for all models are
9 shown in Table 1.

Table 1: The optimal hyperparameter settings for all KnowMTP-combined baselines and their variants.

Method	WOMD		nuPlan	
	K	R	K	R
KnowMTP+GameFormer	5	20	5	20
<i>w/o pos</i>	5	20	5	20
<i>w/o vel</i>	5	20	5	20
<i>w/o angle</i>	5	20	5	20
<i>w/o type</i>	5	20	5	20
<i>w/o safety</i>	5	20	5	20
KnowMTP+MTR	10	20	10	20
<i>w/o pos</i>	10	20	10	20
<i>w/o vel</i>	10	20	10	20
<i>w/o angle</i>	10	20	10	20
<i>w/o type</i>	10	20	10	20
<i>w/o safety</i>	10	20	10	20
KnowMTP+BeTop	10	20	10	20
<i>w/o pos</i>	10	20	10	20
<i>w/o vel</i>	10	20	10	20
<i>w/o angle</i>	10	20	10	20
<i>w/o type</i>	10	20	10	20
<i>w/o safety</i>	10	10	10	10
KnowMTP+EDA	10	10	10	10
<i>w/o pos</i>	10	20	10	20
<i>w/o vel</i>	10	20	10	20
<i>w/o angle</i>	10	20	10	20
<i>w/o type</i>	10	20	10	20
<i>w/o safety</i>	5	20	5	20