

## A APPENDIX

### A.1 IMPLEMENTATION DETAILS

**Intelligent Driver Model (IDM).** IDM is given by Equation 9 and Equation 10. The model describes the acceleration  $\dot{v}_{back}$  of the back agent, as a function of the agent’s velocity  $v_{back}$ , the reference velocity  $v_0$ , the difference between the agent velocity and the velocity of the agent in front  $\Delta v = v_{back} - v_{front}$ , and the following distance  $\varphi = s_{front} + L_{length,front} - s_{back}$ . Here,  $s_{front}$  is the position of the front agent,  $s_{back}$  denotes the position of the back agent, and  $L_{length,front}$  denotes the length of the front agent. The physical interpretation of the parameters are the minimum following time,  $T$ , the minimum following gap,  $s_0$ , the maximum acceleration,  $a$ , the minimum following gap,  $s_0$ , the maximum acceleration,  $a$ , and the comfortable braking deceleration,  $b$ .

$$\dot{v}_{back} = a \left[ 1 - \left( \frac{v_{back}}{v_0} \right)^\delta - \left( \frac{\phi(v_{back}, \Delta v)}{\varphi} \right)^2 \right] \quad (9)$$

$$\phi(v_{back}, \Delta v) = s_0 + v_{back}T + \frac{v_{back}\Delta v}{2\sqrt{ab}} \quad (10)$$

Table 2: **Parameters of IDM.**

Parameter	Value
Desired speed $v_0$	6 m/s
Time gap $T$	1.0 s
Minimum gap $s_0$	2 m
Acceleration exponent $\delta$	4
Acceleration $a$	5.0 m/s <sup>2</sup>
Comfortable deceleration $b$	5.0 m/s <sup>2</sup>

**Policy learning parameters.** For Independent Policy Learning (IPL) and single-agent reinforcement learning algorithms, we utilize Soft-Actor-Critic (SAC) (Haarnoja et al., 2018) and Adam optimizer (Kingma & Ba, 2015). Detailed parameters are shown in Table 3.

Table 3: **Hyperparameters of SAC.**

Parameter	Value
optimizer	Adam
actor learning rate	$1 \cdot 10^{-4}$
critic learning rate	$5 \cdot 10^{-4}$
tune learning rate	$1 \cdot 10^{-4}$
discount ( $\gamma$ )	0.9
batch size	128
replay buffer size	$10^6$
nonlinearity	ReLU
target smoothing coefficient ( $\tau$ )	0.005
target update interval	200

### A.2 RESULTS ON OUR COORDINATED TRAFFIC FLOW

More results are shown in Table 4, Figure 7, Figure 8, Figure 9, Figure 10, Figure 11, Figure 12, Figure 13, and Figure 14.

### A.3 RESULTS ON ZERO-SHOT TRANSFER.

More results are shown in Table 5, Table 6, Table 7, Table 8.

Table 4: **Quantitative performance of traffic flows.** The table reports the percentage of different metrics in intersection, bottleneck, merge, and roundabout. A “†” indicates our proposed traffic flow.

Methods	Intersection					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
IDM	70.4 ± 0.0	29.6 ± 0.0	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	42.1 ± 0.0
FLOW	79.6 ± 0.5	15.9 ± 0.6	2.0 ± 0.2	1.2 ± 0.1	<b>0.0 ± 0.0</b>	47.4 ± 0.2
CoPO	79.6 ± 0.3	17.6 ± 0.4	1.3 ± 0.1	1.4 ± 0.1	0.1 ± 0.1	46.8 ± 0.1
FailMaker	45.3 ± 0.3	52.5 ± 0.3	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	28.7 ± 0.1
Ours†	<b>86.9 ± 0.5</b>	<b>9.0 ± 0.4</b>	2.8 ± 0.1	1.2 ± 0.1	0.2 ± 0.1	<b>51.0 ± 0.2</b>
Methods	Bottleneck					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
IDM	67.0 ± 0.0	33.0 ± 0.0	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	49.1 ± 0.0
FLOW	76.2 ± 0.5	9.8 ± 0.4	14.3 ± 0.6	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	75.1 ± 0.3
CoPO	80.3 ± 0.6	<b>9.3 ± 0.7</b>	11.4 ± 0.4	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	74.5 ± 0.3
FailMaker	21.3 ± 0.2	78.6 ± 0.1	0.1 ± 0.0	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	29.0 ± 0.2
Ours†	<b>83.4 ± 0.4</b>	9.4 ± 0.3	7.3 ± 0.3	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	<b>76.4 ± 0.1</b>
Methods	Merge					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
IDM	60.0 ± 0.0	40.0 ± 0.0	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	46.9 ± 0.0
FLOW	66.2 ± 0.4	25.4 ± 0.5	8.5 ± 0.2	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	55.1 ± 0.2
CoPO	69.3 ± 0.5	26.9 ± 0.6	3.8 ± 0.3	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	54.9 ± 0.2
FailMaker	16.0 ± 0.2	80.9 ± 0.2	3.4 ± 0.2	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	16.2 ± 0.1
Ours†	<b>83.1 ± 0.5</b>	<b>16.2 ± 0.5</b>	0.6 ± 0.1	0.2 ± 0.1	<b>0.0 ± 0.0</b>	<b>60.0 ± 0.2</b>
Methods	Roundabout					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
IDM	73.6 ± 0.0	26.4 ± 0.0	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	<b>0.0 ± 0.0</b>	38.1 ± 0.0
FLOW	72.7 ± 0.6	22.4 ± 0.4	4.8 ± 0.2	<b>0.0 ± 0.0</b>	0.1 ± 0.1	39.2 ± 0.1
CoPO	81.2 ± 0.6	14.3 ± 0.5	4.0 ± 0.2	<b>0.0 ± 0.0</b>	0.5 ± 0.1	39.0 ± 0.1
FailMaker	21.3 ± 0.3	77.6 ± 0.3	0.5 ± 0.0	<b>0.0 ± 0.0</b>	0.6 ± 0.1	15.7 ± 0.1
Ours†	<b>84.6 ± 0.5</b>	<b>11.5 ± 0.3</b>	3.6 ± 0.3	0.1 ± 0.0	0.5 ± 0.1	<b>42.2 ± 0.1</b>

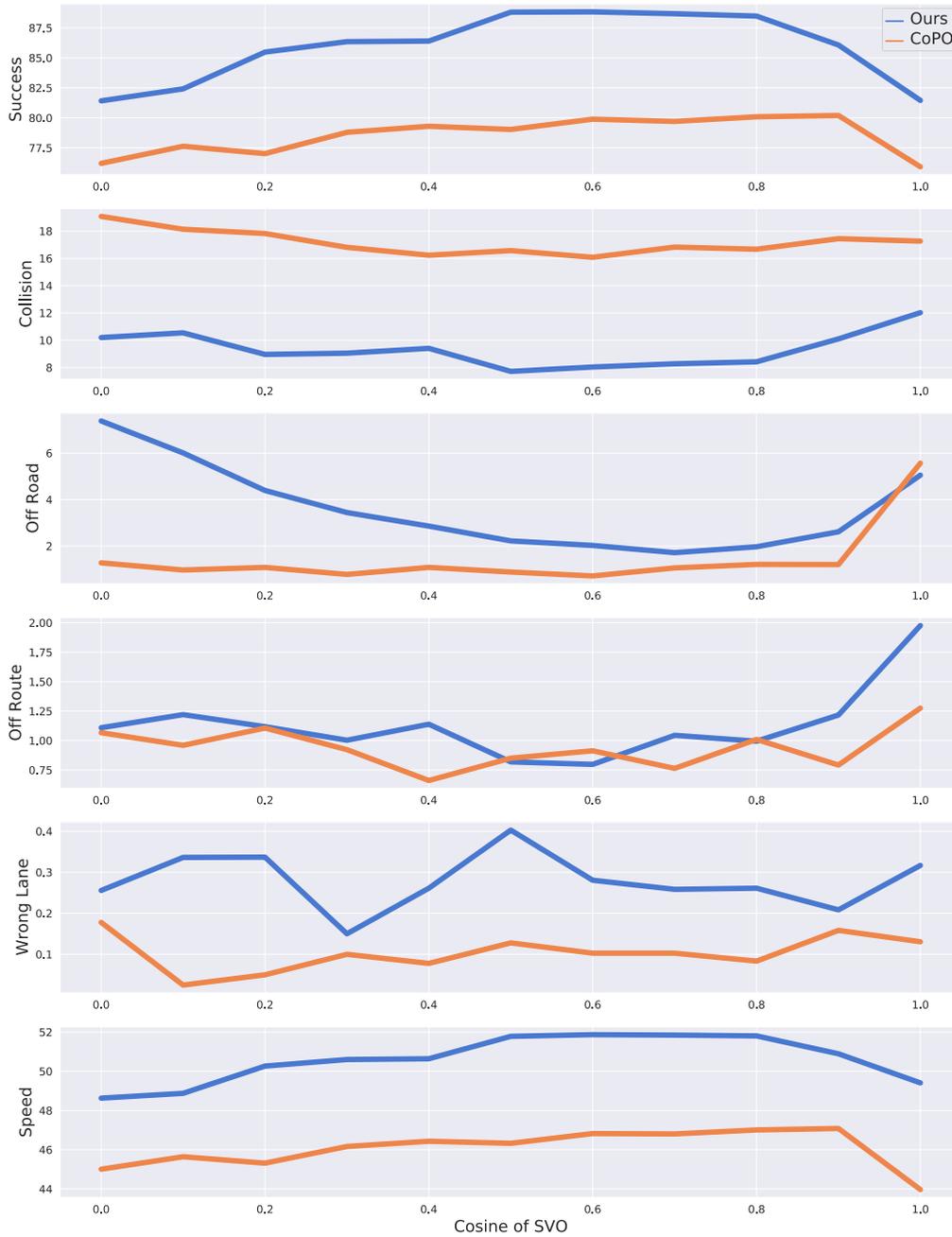


Figure 7: The performance of CoPO and our traffic flow in intersection.

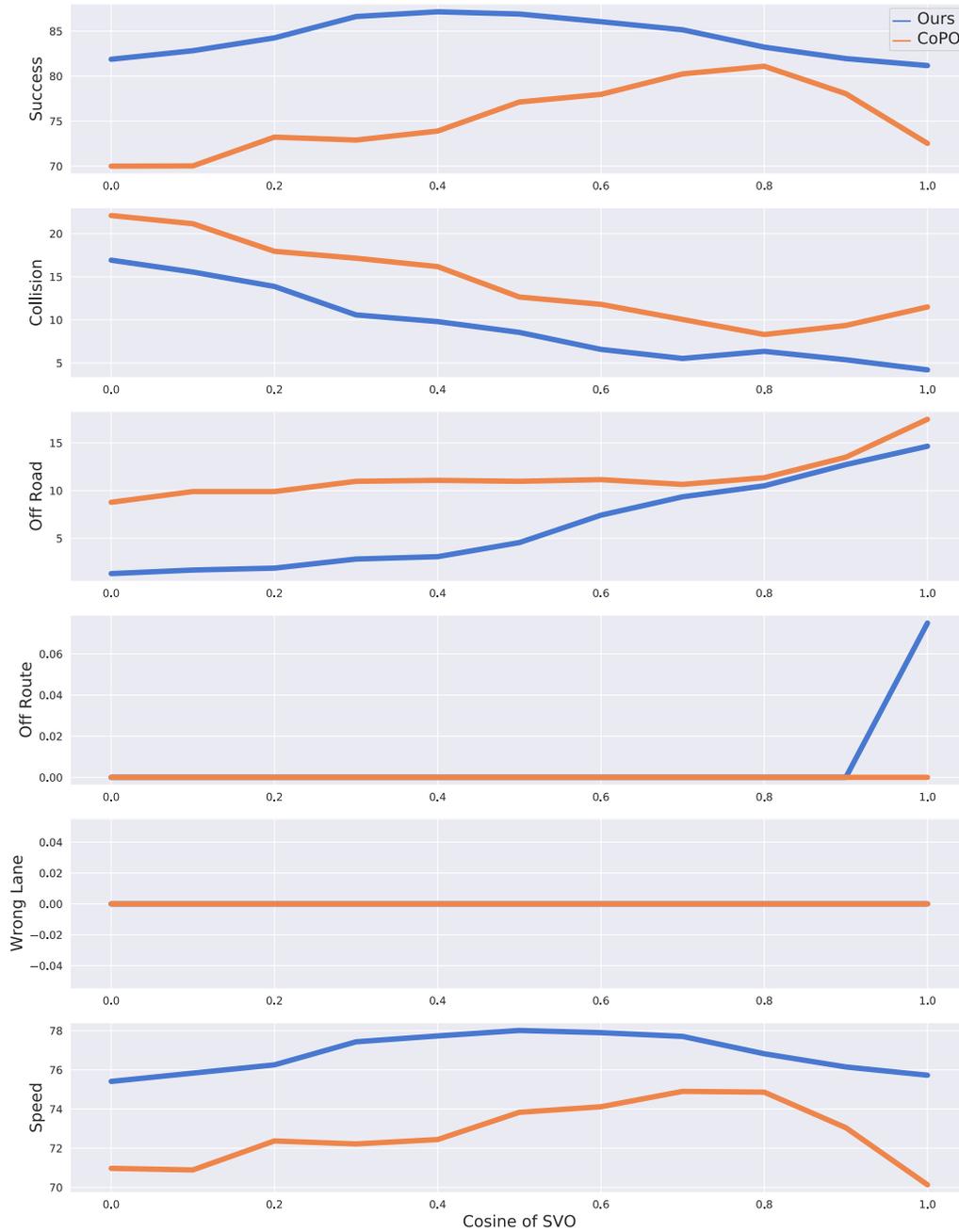


Figure 8: The performance of CoPO and our traffic flow in bottleneck.

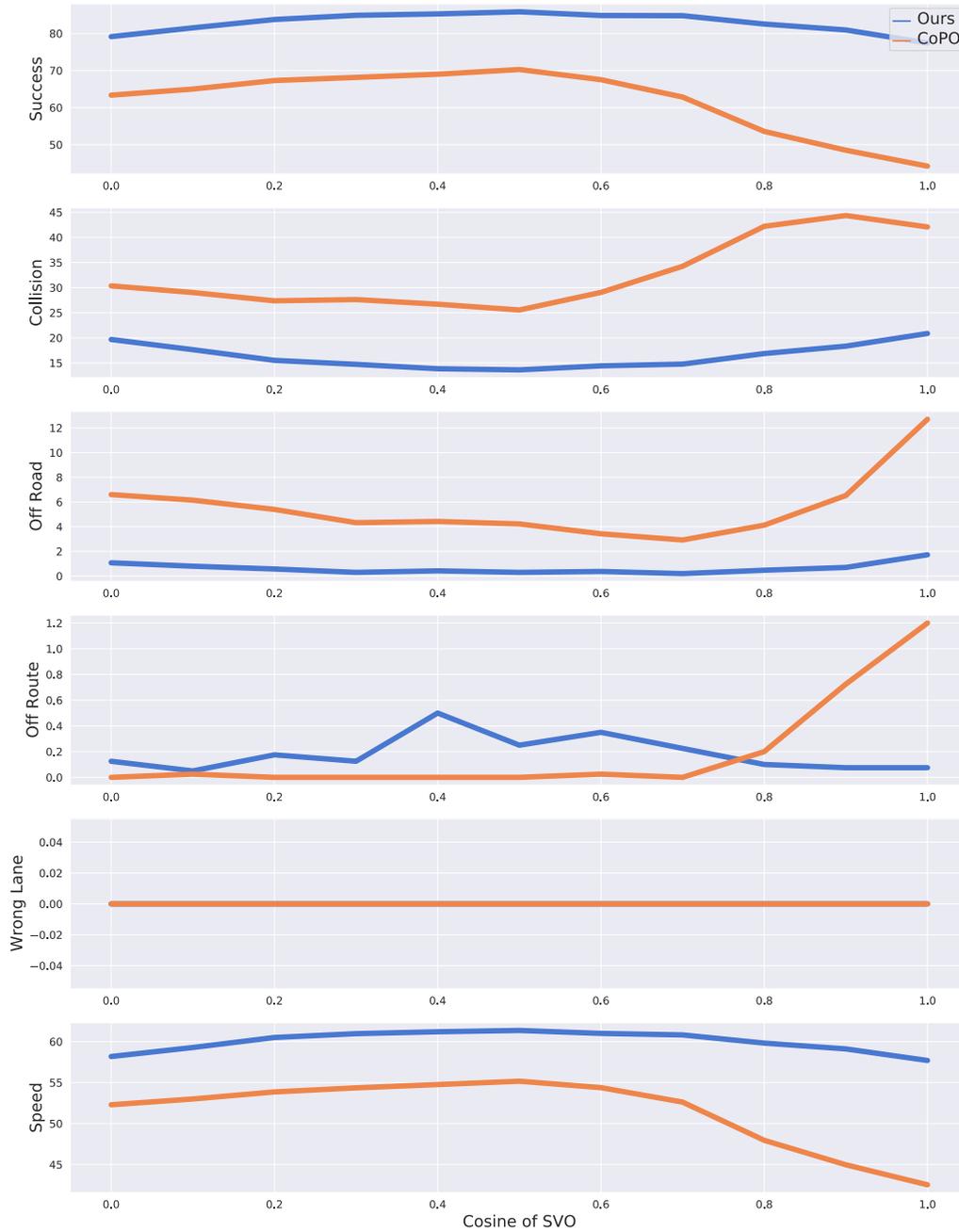


Figure 9: The performance of CoPO and our traffic flow in merge.

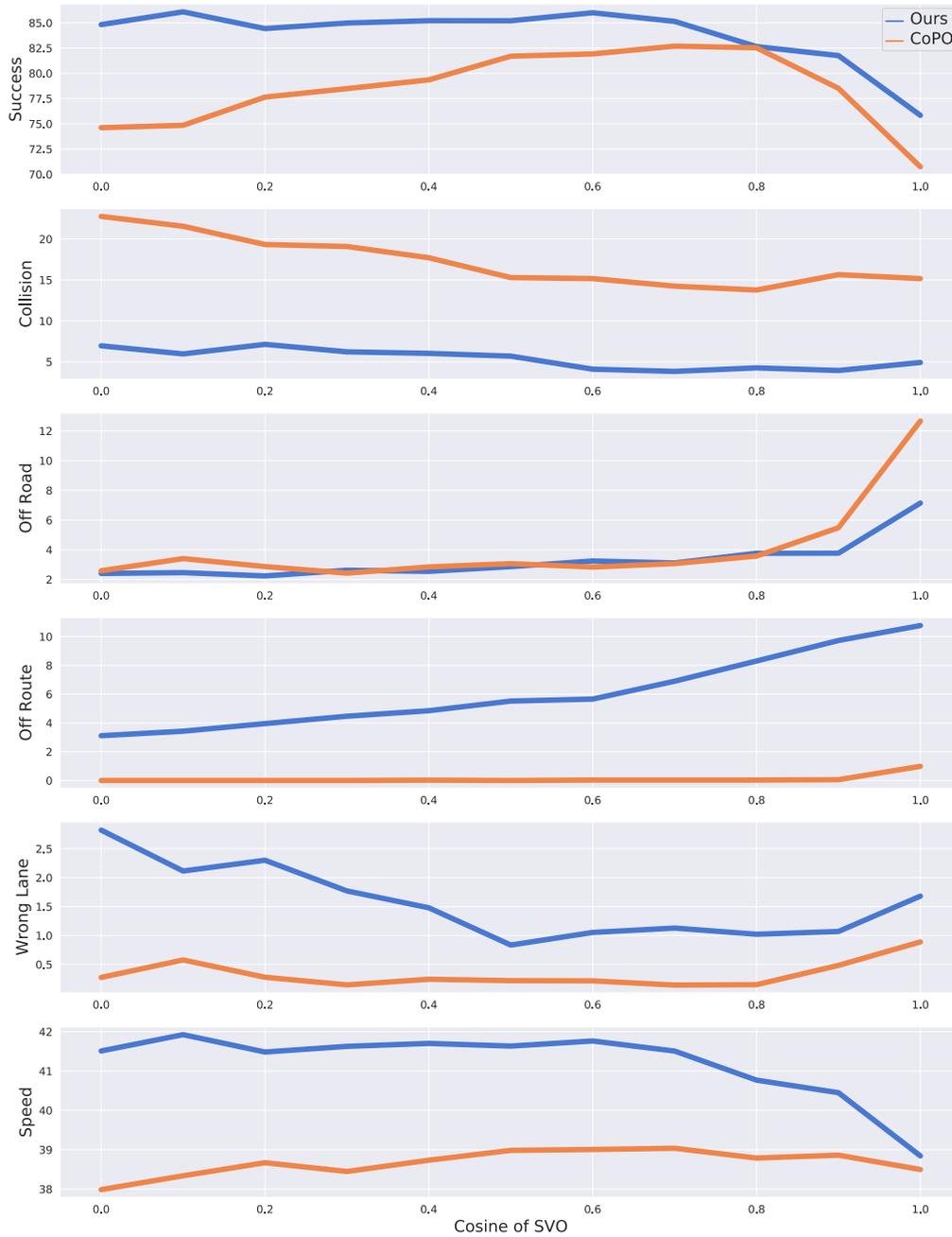


Figure 10: The performance of CoPO and our traffic flow in roundabout.

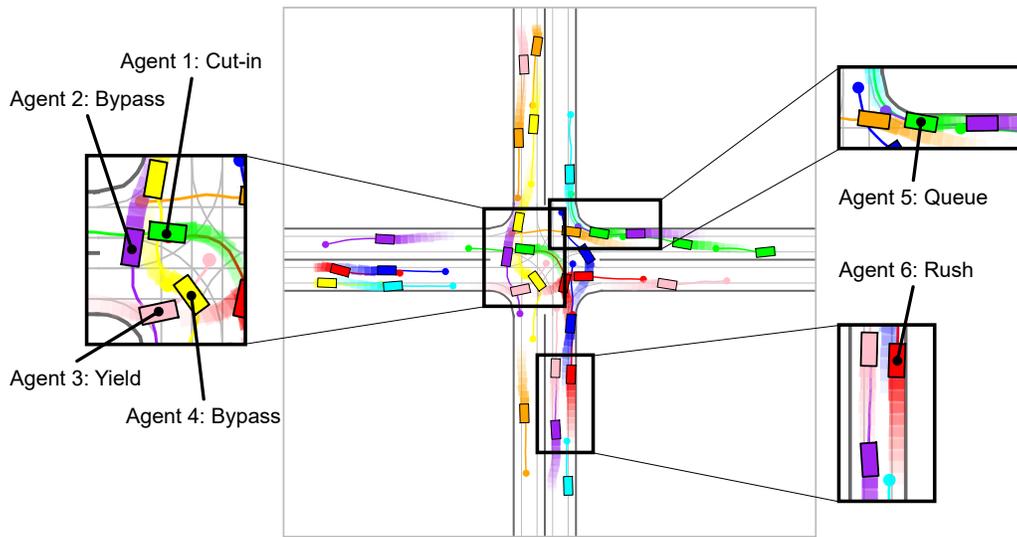


Figure 11: Coordinated behaviors in intersection.

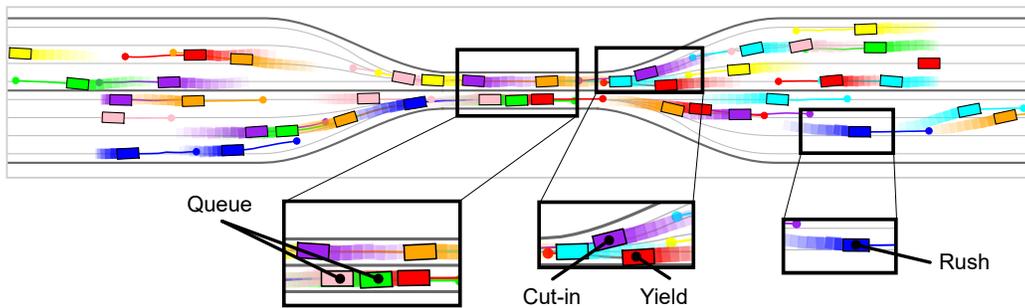


Figure 12: Coordinated behaviors in bottleneck.

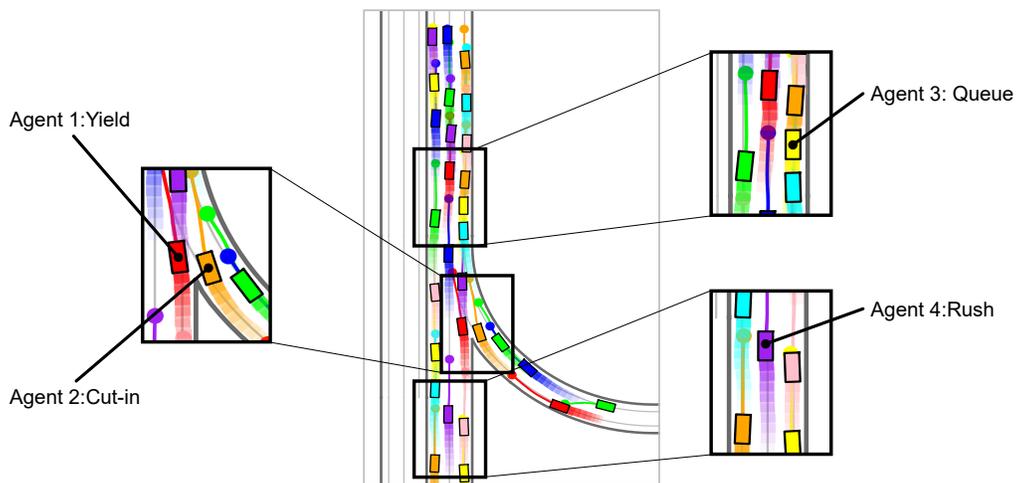


Figure 13: Coordinated behaviors in merge.

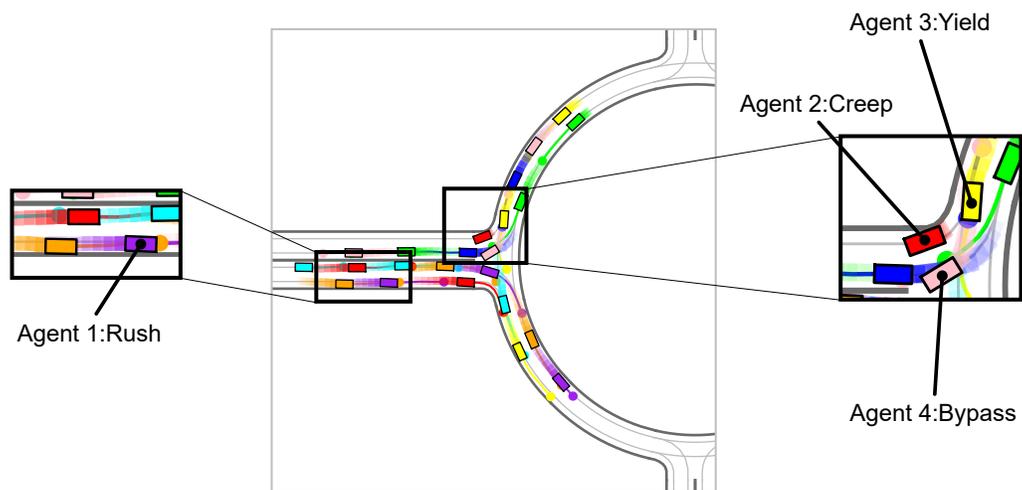


Figure 14: Coordinated behaviors in roundabout.

Table 5: **Zero-shot transfer performance in intersection.** Each subtable stores results of different driving policies in the same traffic flow. A “†” indicates our proposed method.

Evaluate in IDM	Intersection					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	79.5	6.0	2.0	0.0	0.0	47.1
VRL/FLOW	67.0	30.5	<b>0.5</b>	0.5	0.5	39.5
VRL/CoPO	69.0	27.0	<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>43.0</b>
eRARL	22.5	<b>20.5</b>	19.5	11.0	<b>0.0</b>	25.2
VRL/Ours†	69.0	28.5	3.5	2.0	<b>0.0</b>	40.8
iRARL†	<b>71.5</b>	21.5	6.0	1.0	<b>0.0</b>	42.1

Evaluate in FLOW	Intersection					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	65.5	18.5	13.0	<b>1.5</b>	0.5	42.8
VRL/FLOW	87.5	6.5	1.5	0.0	0.0	51.5
VRL/CoPO	76.0	12.0	<b>2.0</b>	3.0	<b>0.0</b>	46.5
eRARL	26.0	13.5	13.0	16.0	0.5	25.7
VRL/Ours†	79.0	11.0	<b>2.0</b>	4.5	<b>0.0</b>	47.9
iRARL†	<b>83.5</b>	<b>8.0</b>	<b>2.0</b>	3.0	0.5	<b>49.7</b>

Evaluate in CoPO	Intersection					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	69.5	20.0	8.0	1.0	0.5	45.0
VRL/FLOW	75.5	20.0	1.5	<b>0.0</b>	<b>0.0</b>	46.1
VRL/CoPO	81.5	16.0	1.0	0.0	0.0	48.7
eRARL	25.5	<b>11.5</b>	15.5	14.5	0.5	26.0
VRL/Ours†	74.5	19.0	1.0	2.0	<b>0.0</b>	45.8
iRARL†	<b>79.5</b>	16.5	<b>0.0</b>	1.0	<b>0.0</b>	<b>47.7</b>

Evaluate in FailMaker	Intersection					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	<b>55.0</b>	<b>22.5</b>	22.0	<b>0.0</b>	0.5	<b>37.3</b>
VRL/FLOW	52.0	37.0	12.0	<b>0.0</b>	<b>0.0</b>	36.0
VRL/CoPO	51.0	43.5	<b>4.0</b>	1.0	0.5	34.7
eRARL	26.5	11.5	17.5	14.5	0.0	25.9
VRL/Ours†	51.5	33.0	16.5	1.5	<b>0.0</b>	36.5
iRARL†	51.0	40.5	8.0	<b>0.0</b>	<b>0.0</b>	35.9

Evaluate in Ours wo Adv	Intersection					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	77.0	<b>10.0</b>	11.0	1.0	<b>0.0</b>	47.1
VRL/FLOW	84.0	13.5	<b>1.0</b>	<b>0.5</b>	0.5	50.1
VRL/CoPO	81.5	14.5	<b>1.0</b>	2.0	<b>0.0</b>	48.8
eRARL	21.5	12.5	21.0	15.0	0.5	24.9
VRL/Ours†	87.0	7.0	1.5	1.5	0.5	51.9
iRARL†	<b>85.5</b>	11.0	<b>1.0</b>	<b>0.5</b>	<b>0.0</b>	<b>50.9</b>

Evaluate in Ours	Intersection					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	74.5	14.5	7.5	2.5	<b>0.0</b>	45.9
VRL/FLOW	82.5	15.0	2.0	<b>0.0</b>	<b>0.0</b>	49.6
VRL/CoPO	78.5	18.5	<b>1.5</b>	1.0	<b>0.0</b>	47.5
eRARL	24.0	12.5	15.5	18.0	0.5	25.3
VRL/Ours†	<b>85.0</b>	<b>9.0</b>	3.0	1.0	0.5	<b>50.8</b>
iRARL†	86.0	10.5	0.5	1.5	0.0	51.4

Table 6: **Zero-shot transfer performance in bottleneck.** Each subtable stores results of different driving policies in the same traffic flow. A “†” indicates our proposed method.

Evaluate in IDM	Bottleneck					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	91.5	6.0	2.5	0.0	0.0	72.8
VRL/FLOW	53.0	25.5	19.5	2.5	0.0	51.7
VRL/CoPO	64.5	24.0	10.5	2.5	0.0	<b>59.6</b>
eRARL	50.0	<b>10.0</b>	37.5	3.0	0.0	33.9
VRL/Ours†	67.0	20.5	12.5	<b>0.0</b>	<b>0.0</b>	55.8
iRARL†	<b>74.5</b>	21.0	<b>5.5</b>	<b>0.0</b>	<b>0.0</b>	57.6

Evaluate in FLOW	Bottleneck					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	51.0	24.0	26.5	0.5	<b>0.0</b>	54.8
VRL/FLOW	79.0	18.5	2.0	0.5	0.0	76.1
VRL/CoPO	60.5	27.5	12.5	<b>0.0</b>	<b>0.0</b>	65.5
eRARL	42.0	<b>18.5</b>	39.5	<b>0.0</b>	<b>0.0</b>	25.6
VRL/Ours†	72.5	24.0	4.5	<b>0.0</b>	<b>0.0</b>	<b>68.7</b>
iRARL†	<b>73.0</b>	25.5	<b>2.0</b>	<b>0.0</b>	<b>0.0</b>	68.4

Evaluate in CoPO	Bottleneck					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	48.5	16.5	33.0	2.0	<b>0.0</b>	57.2
VRL/FLOW	61.0	<b>6.5</b>	33.0	<b>0.0</b>	<b>0.0</b>	64.6
VRL/CoPO	89.0	9.0	1.5	0.5	0.0	81.8
eRARL	51.0	11.0	34.5	3.5	<b>0.0</b>	35.1
VRL/Ours†	65.0	30.5	5.5	<b>0.0</b>	<b>0.0</b>	67.2
iRARL†	<b>74.0</b>	25.5	<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>71.0</b>

Evaluate in FailMaker	Bottleneck					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	<b>20.5</b>	<b>59.0</b>	26.0	<b>0.0</b>	<b>0.0</b>	<b>34.5</b>
VRL/FLOW	4.5	94.0	3.0	<b>0.0</b>	<b>0.0</b>	24.2
VRL/CoPO	6.5	88.5	6.5	<b>0.0</b>	<b>0.0</b>	27.5
eRARL	38.0	23.0	38.5	0.5	0.0	26.1
VRL/Ours†	2.5	87.5	13.5	<b>0.0</b>	<b>0.0</b>	24.3
iRARL†	4.5	94.0	<b>2.0</b>	<b>0.0</b>	<b>0.0</b>	24.1

Evaluate in Ours wo Adv	Bottleneck					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	52.5	26.0	21.0	0.5	<b>0.0</b>	58.3
VRL/FLOW	75.5	19.5	4.5	0.5	<b>0.0</b>	74.6
VRL/CoPO	71.5	13.5	15.5	1.0	<b>0.0</b>	70.9
eRARL	36.0	23.5	42.0	0.5	<b>0.0</b>	26.6
VRL/Ours†	91.0	4.0	5.0	0.0	0.0	81.3
iRARL†	<b>89.5</b>	<b>8.5</b>	<b>2.0</b>	<b>0.0</b>	<b>0.0</b>	<b>79.6</b>

Evaluate in Ours	Bottleneck					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	50.5	27.0	22.0	0.5	<b>0.0</b>	57.0
VRL/FLOW	73.5	24.0	<b>2.0</b>	0.5	<b>0.0</b>	73.8
VRL/CoPO	69.5	11.0	19.0	1.0	<b>0.0</b>	69.9
eRARL	36.5	19.0	43.5	1.0	<b>0.0</b>	27.7
VRL/Ours†	<b>85.0</b>	<b>7.0</b>	8.0	<b>0.0</b>	<b>0.0</b>	<b>78.3</b>
iRARL†	88.5	11.5	0.0	0.0	0.0	79.8

Table 7: **Zero-shot transfer performance in merge.** Each subtable stores results of different driving policies in the same traffic flow. A “†” indicates our proposed method.

Evaluate in IDM	Merge					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	92.0	6.0	2.0	0.0	0.0	62.3
VRL/FLOW	41.5	55.5	7.5	0.5	0.0	29.1
VRL/CoPO	54.5	19.0	22.5	9.0	0.0	38.0
eRARL	66.5	5.0	14.5	14.0	0.0	45.9
VRL/Ours†	67.5	18.5	14.5	0.0	0.0	43.6
iRARL†	85.0	15.0	0.0	0.0	0.0	53.2

Evaluate in FLOW	Merge					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	35.0	38.0	27.5	0.0	0.0	40.5
VRL/FLOW	69.5	25.0	5.5	0.0	0.0	56.0
VRL/CoPO	52.0	35.0	12.0	1.0	0.0	48.2
eRARL	17.0	40.5	33.5	9.5	0.0	24.2
VRL/Ours†	62.5	33.5	4.0	0.0	0.0	54.5
iRARL†	67.5	21.5	11.0	0.0	0.0	56.0

Evaluate in CoPO	Merge					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	36.5	44.5	19.0	0.0	0.0	40.0
VRL/FLOW	50.0	44.0	5.5	0.5	0.0	46.6
VRL/CoPO	70.5	24.5	5.0	0.0	0.0	55.4
eRARL	17.0	39.0	34.0	10.0	0.0	23.5
VRL/Ours†	57.0	37.5	5.5	0.0	0.0	49.9
iRARL†	59.5	40.0	0.5	0.0	0.0	52.0

Evaluate in FailMaker	Merge					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	9.0	74.5	18.0	0.0	0.0	15.1
VRL/FLOW	9.0	81.0	11.5	0.0	0.0	17.5
VRL/CoPO	10.0	83.5	10.0	0.0	0.0	19.2
eRARL	19.5	37.5	39.5	6.5	0.0	21.6
VRL/Ours†	8.5	88.0	4.0	0.0	0.0	16.8
iRARL†	12.0	78.5	11.0	0.0	0.0	18.5

Evaluate in Ours wo Adv	Merge					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	65.0	16.0	19.0	0.0	0.0	51.3
VRL/FLOW	71.5	21.0	7.5	0.0	0.0	55.0
VRL/CoPO	70.0	24.5	5.5	0.5	0.0	55.1
eRARL	18.5	29.0	47.5	6.5	0.0	27.6
VRL/Ours†	84.5	14.0	1.5	0.0	0.0	60.7
iRARL†	83.5	12.5	3.5	0.5	0.0	61.2

Evaluate in Ours	Merge					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	64.5	18.0	17.5	0.0	0.0	51.1
VRL/FLOW	69.5	22.5	8.0	0.0	0.0	54.1
VRL/CoPO	66.0	23.5	10.5	0.5	0.0	53.4
eRARL	18.5	25.0	50.5	7.0	0.0	27.2
VRL/Ours†	83.5	15.0	1.5	0.0	0.0	61.0
iRARL†	85.0	13.5	1.5	0.0	0.0	61.3

Table 8: **Zero-shot transfer performance in roundabout.** Each subtable stores results of different driving policies in the same traffic flow. A “†” indicates our proposed method.

Evaluate in IDM	Roundabout					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	83.0	9.0	5.5	0.0	2.5	38.7
VRL/FLOW	44.5	51.5	<b>4.0</b>	1.0	<b>0.0</b>	23.8
VRL/CoPO	59.0	33.0	9.5	<b>0.0</b>	<b>0.0</b>	31.5
eRARL	32.5	<b>16.0</b>	55.5	6.0	0.5	19.7
VRL/Ours†	40.5	30.5	31.0	0.5	1.0	21.1
iRARL†	<b>63.0</b>	18.5	17.0	<b>0.0</b>	1.5	<b>32.3</b>

Evaluate in FLOW	Roundabout					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	54.0	27.0	18.5	<b>0.0</b>	0.5	32.7
VRL/FLOW	84.0	11.5	4.5	0.0	0.0	42.7
VRL/CoPO	61.5	29.5	9.0	<b>0.0</b>	<b>0.0</b>	38.4
eRARL	30.5	<b>24.0</b>	46.0	5.0	0.5	17.7
VRL/Ours†	66.5	25.5	9.5	<b>0.0</b>	<b>0.0</b>	38.6
iRARL†	<b>70.5</b>	26.5	<b>2.5</b>	<b>0.0</b>	0.5	<b>40.1</b>

Evaluate in CoPO	Roundabout					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	55.5	18.5	23.0	0.5	2.5	32.4
VRL/FLOW	62.0	<b>12.0</b>	24.0	<b>0.0</b>	2.0	35.7
VRL/CoPO	86.5	12.0	1.5	0.0	0.0	41.8
eRARL	32.0	25.0	46.5	4.5	<b>0.5</b>	17.2
VRL/Ours†	70.0	26.5	<b>3.5</b>	<b>0.0</b>	<b>0.5</b>	38.8
iRARL†	<b>76.5</b>	17.5	5.5	<b>0.0</b>	<b>0.5</b>	<b>39.9</b>

Evaluate in FailMaker	Roundabout					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	19.5	64.0	20.5	<b>0.0</b>	0.5	20.2
VRL/FLOW	<b>29.5</b>	<b>57.5</b>	14.0	<b>0.0</b>	<b>0.0</b>	<b>25.0</b>
VRL/CoPO	21.0	70.5	<b>10.0</b>	<b>0.0</b>	0.5	22.7
eRARL	29.5	17.0	51.5	5.0	<b>0.0</b>	14.5
VRL/Ours†	17.0	63.0	24.5	<b>0.0</b>	<b>0.0</b>	19.9
iRARL†	18.5	<b>57.5</b>	25.5	<b>0.0</b>	<b>0.0</b>	20.5

Evaluate in Ours wo Adv	Roundabout					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	75.5	<b>9.5</b>	13.0	<b>0.0</b>	2.0	38.0
VRL/FLOW	74.0	12.0	14.0	<b>0.0</b>	<b>0.0</b>	39.7
VRL/CoPO	82.0	13.5	<b>1.5</b>	1.5	2.5	42.4
eRARL	30.0	16.5	54.5	5.0	<b>0.0</b>	17.7
VRL/Ours†	87.5	9.0	3.5	0.0	0.0	43.2
iRARL†	<b>86.0</b>	12.0	2.0	<b>0.0</b>	<b>0.0</b>	<b>42.8</b>

Evaluate in Ours	Roundabout					
	Success (↑)	Collision (↓)	Off Road (↓)	Off Route (↓)	Wrong Lane (↓)	Speed (↑)
VRL/IDM	72.5	13.0	13.0	<b>0.0</b>	1.5	37.8
VRL/FLOW	81.0	<b>4.0</b>	14.5	0.5	<b>0.0</b>	41.2
VRL/CoPO	80.5	17.5	<b>1.5</b>	1.0	<b>0.0</b>	42.2
eRARL	31.0	15.5	56.0	4.5	0.5	18.2
VRL/Ours†	<b>84.5</b>	11.5	5.0	<b>0.0</b>	<b>0.0</b>	<b>42.3</b>
iRARL†	87.0	10.5	2.0	0.0	0.5	42.9