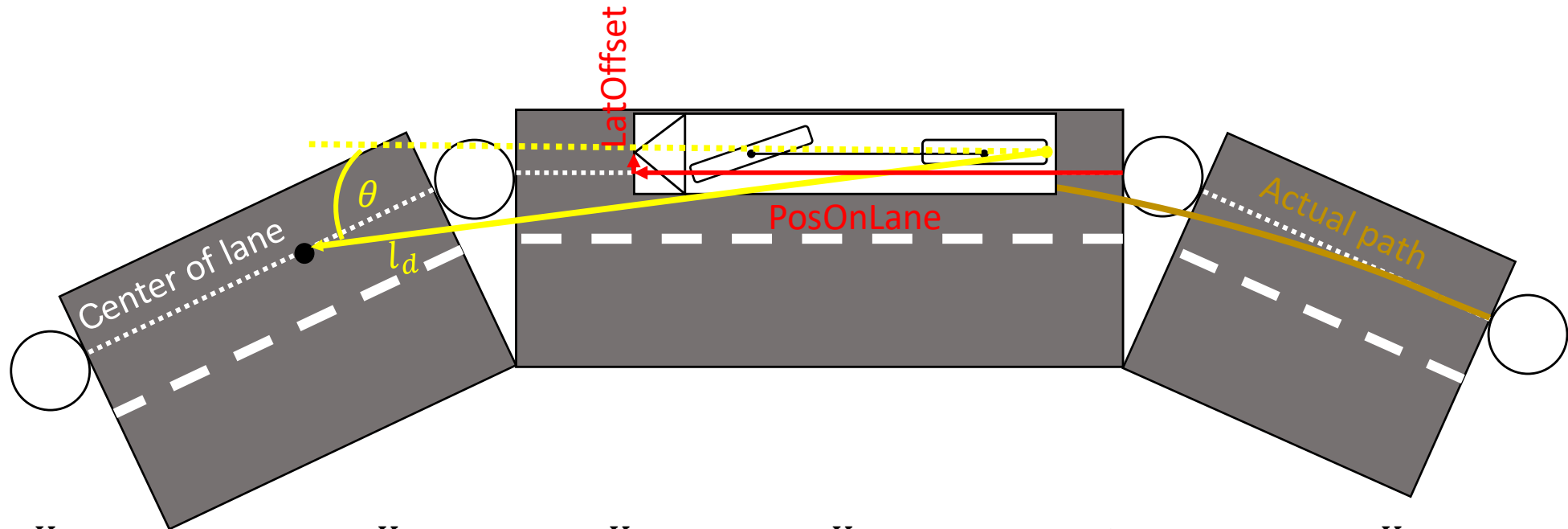




$$\begin{bmatrix} X_{lane_End} \\ Y_{lane_End} \end{bmatrix}$$

$$\begin{bmatrix} X_{veh_G} \\ Y_{veh_G} \end{bmatrix} = f \left(\begin{bmatrix} X_{lane_Start} \\ Y_{lane_Start} \end{bmatrix}; \begin{bmatrix} X_{lane_End} \\ Y_{lane_End} \end{bmatrix}; \begin{bmatrix} PosOnLane \\ LatOffset \end{bmatrix} \right)$$

$$\begin{bmatrix} X_{lane_Start} \\ Y_{lane_Start} \end{bmatrix}$$