



| Attribute | Comments | Reference |
|-----------------------|---|-----------|
| Action Item | Designate roads for CAVs as they are ready | [25] |
| Category | Infrastructure | |
| Code | I-08 | |
| Description | <p>General description:</p> <ul style="list-style-type: none"> - Design freeway network with exclusive lanes for CAVs. <p>Context-specific description:</p> <ul style="list-style-type: none"> - This solution is suggested for freeways and highways with high traffic volume rather smaller arterial roads. Therefore, this solution might not be one of the first solutions to be adopted by smaller to mid-sized regions. - Also, these can be dynamic lanes that can allow all types of vehicles in non-peak hours. | [40] |
| Stakeholders | Regional planing agencies, municipality, public works, state department of transportation | |
| Scale | Regional | |
| Impact/Benefit | <p>Direct:</p> <ul style="list-style-type: none"> Reduced congestion Higher safety as CAVs interact less with traditional vehicles Impact road design <p>Indirect:</p> <ul style="list-style-type: none"> Positive economic impacts Efficient CAV deployment, especially in mixed-fleets (CAVs and traditional cars) Reduced VMTs | |
| Barriers | Waiting for higher CAV adoption percentages | |
| Cost | Retrofitting existing roads Modelling and assessing network efficiency with CAV lanes only (\$\$\$/SS) | |
| Time horizon | Medium term, medium/high CAV adoption | |
| Example/visualization | Shutterstock  | [40] |

| Attribute | Comments | Reference |
|-----------------------|---|---------------------|
| Action Item | Establish clear CAV (as well as TNC) drop-off and pick-up zones | [5] [16] |
| Category | Street Design/Infrastructure | |
| Code | SD-07/I-07 | |
| Description | <p>General description:</p> <ul style="list-style-type: none"> - Add drop-off/pick-up areas around hot spots - To drop off passengers, vehicles on major streets will first turn right. - Turning off of the main street to stop reduces congestion on main corridors and allows more space along the curb to be dedicated to other uses. Where bicycle traffic is heaviest, right-turn pick-ups and drop-offs may be less ideal. <p>Context-specific description:</p> <ul style="list-style-type: none"> - Drop-off areas are part of flex zones where they are used for drop-off/pick-up, loading/unloading, transit stops, vendors, parklets and rideshares - Drop-off/pick-up locations are located at every other block, making it convenient for people to move things from their vehicle to their homes and reduce distance required to travel to individual stops. | [5] [16] [44] |
| Stakeholders | Regional planning agencies, municipality, public works, transportation network companies | |
| Scale | Regional | |
| Impact/Benefit | <p>Direct:</p> <ul style="list-style-type: none"> Safer and better reception of CAVs and SAVs Reduced VMT New road design <p>Indirect:</p> <ul style="list-style-type: none"> Reduced congestion as there will be less cars on the road and effective allocation of drop-off and pick-up locations | |
| Barriers | Opposition from developers | |
| Cost | Retrofitting existing roads Including requirements as part of building codes (SS) | |
| Time horizon | Short/medium term, medium CAV adoption | |
| Example/visualization | Image from the Blueprint for Autonomous Urbanism, Courtesy of NACTO (National Association of City Transportation Officials)  | [16] |