BUSES

Dedicated transit lanes are used to speed up transit services, such as bus, light-rail, bus-rapid transit on busy streets, especially those corridors with frequent service. Owing to the high passenger capacity of transit, a dedicated transit lane can drastically increase the amount of people that can move along a street. Since dedicated transit lanes reduce traffic delays and increase the reliability of high-quality transit service, they are an important part of encouraging transit use, making the service faster, more reliable, and more enjoyable.

- **Curbside lanes** are immediately adjacent to the curb on the right-hand side of the street. Curbside lanes work best on streets with few driveways and limited right turning traffic.
- **Offset lanes** operate outside of a parking lane. Bus stops are located in bus bulbs in the parking lane. Offset lanes are compromised by transit vehicles entering, exiting, and waiting for curbside parking.
- Median lanes occupy the center of the street. Transit may operate within a median, typically then separated from general traffic by median islands, or adjacent to a median with doors on both sides of the transit vehicle to permit left and right side boarding.
- Contraflow bus lanes are generally implemented on one-way streets where the transit lane operates in the opposite direction of general traffic and is located adjacent to the curb.

Transit streets or plazas are street segments that prohibit private vehicle traffic and reserve the entire travel way for transit vehicles. Bicycles and pedestrians are also generally permitted. Transit plazas are typically used where transit services are extremely frequent, transit use is concentrated, and right-ofways are severely constrained.

IISF

- Transit lanes are used only on corridors where transit service is very frequent (every 10 minutes or less), ridership is high, and traffic congestion significantly and routinely impedes transit operations.
- Transit lanes may be permanent or time restricted - reserved for transit vehicles only at peak hours of the day and permitted for other uses (such as parking or general traffic) at other times. They may be reserved exclusively for the use of transit vehicles or may have shared use.

DFSIGN

- The minimum acceptable width for a dedicated transit lane is 10 feet for an offset lane or 11 feet for a curbside lane: 12 feet is preferred. Gutters may be included in the calculated dimension of a curbside transit lane.
- The street should be clear for a vertical distance of 12 feet above the street surface. Banners or trees overhanging a curbside used for bus travel shall be maintained above this height.

- Fixtures or plantings should maintain a 2 foot clear zone from the curb where buses or other vehicles travel in the curb lane.
- If the lane is permanently reserved for bus only use, apply "BUS ONLY" pavement markings. If the transit lane is shared for high occupancy vehicle (HOV) use, include appropriate pavement markings.
- Transit lanes may offer an opportunity for porous concrete or asphalt treatments. Where space allows, use rain gardens, bioswales and raised planters in the buffer.

SPECIAL CONSIDERATIONS

- Transit lanes may be separated from general traffic by soft barriers, such as rumble strips, or physical barriers like concrete curbs or rubber bumpers.
- Making transit lanes visually distinctive may discourage encroachment by other road users.
- Bicycle volumes, transit frequency, available right-of-way, total cross section, frequency of transits stops, and time restricted changes in street operation should be considered in determining the appropriateness of a transit lane.
- Private vehicles using dedicated transit lanes for through travel can be an issue. This not only degrades performance, but introducing serious safety concerns. Education and enforcement is always a necessary component when transit lanes

OPERATIONS AND MAINTENANCE

- At intersections, bus lanes may become right-turn only lanes. Use a dotted line to denote where private vehicles may enter the bus lane. If the dedicated lane is only in effect for certain hours, consider restricting right turns to keep the lane clear
- Dedicated transit lanes may require additional enforcement.
- When utility work requires occupying part or all of a dedicated transit lane, have a plan in place to prevent a significant disruption of transit service. Consider repurposing a general traffic lane temporarily, signal changes, or other efforts to reduce delays.
- Transit lanes should not be used for snow storage. In winter, keep access to transit lanes and transit stops clear for both the vehicles and riders. Physically separated transit lanes may require special equipment for snow removal.

DESIGN REFERENCES

 NACTO: Urban Street Design Guide, 2013 Street Design Elements: Transit Streets http://nacto.org/publication/urban-street-design-guide/street-design-elements/transit-streets/

