
Transportation System Considerations

This section addresses transportation system considerations in access management, including TRB Principles of Access Management 1 through 4 and 10:

A. Provide a Specialized Roadway System (Principle 1)

The primary function of major arterial roadways is to safely and efficiently accommodate through traffic. The primary function of local streets is to provide access to adjacent properties. Minor arterials and collectors provide a blend of the mobility and access functions. Design and management of transportation facilities, including access management, must consider the classification and intended function of roadways.

B. Limit Direct Access to Major Roadways (Principle 2)

Providing direct property access to major roadways can significantly affect corridor operations and safety, and is not consistent with the function of the major roadway. Higher levels of access control become more necessary as major road through traffic volumes and speeds increase.

C. Promote Intersection Hierarchy (Principle 3)

Provide appropriate transitions from one roadway classification to the next.

- Freeways intersect arterials with interchanges.
- Arterials intersect collectors.
- Collectors intersect local streets.
- Local streets provide connections to private accesses.

D. Locate Signals to Favor through Movements (Principle 4)

All major arterials, minor arterials, and major collectors within urbanized areas, the urban fringe or areas that may ultimately be subject to urban growth should have long, uniform traffic signal spacing.

- Provides the flexibility to use timing plans that can provide efficient traffic progression over a wide range of speeds and cycle lengths.
- Use a minimum of 1/2 mile spacings on major suburban/urban arterials.
- Use a minimum of 1/4 mile spacings on minor arterials and major collectors where traffic progression is less important than on major arterials.
- Locate cross-roads and full median openings only at locations that conform to the selected spacing interval so that the intersection may be signalized when conditions warrant.
- Where signal location does not conform to recommended spacing, reduce the cross-street green and increase the major street green so as to maintain progression on the major street.

E. Provide a Supporting Street and Circulation System (Principle 10)

- Provide local and collector streets to accommodate access to development.
- Provide access connections between adjacent parcels.
- Require adequate internal circulation for development.
- Provide alternate access from minor roads.
- Provide frontage and backage roads (see Figure 5L-2.01).

Figure 5L-2.01: Frontage and Backage Roads with Adequate Vehicle Queue Storage

