

STRATEGIES GENERALLY APPROPRIATE FOR MINOR ARTERIALS

Minor Arterial Street System - The minor arterial street system should interconnect with and augment the urban principal arterial system and provide service to trips of moderate length at a somewhat lower level of travel mobility than principal arterials. This system also distributes travel to geographic areas smaller than those identified with the higher system.

The minor arterial street system includes all arterials not classified as principal and contains facilities that place more emphasis on land access than the higher system, and offer a lower level of traffic mobility. Such facilities may be expected to provide for movement within communities, but ideally should not penetrate identifiable neighborhoods.

SYSTEM MANAGEMENT

Signal System Improvements / Coordination - Coordination is important for arterials because of the greater emphasis on mobility for longer trips. Signal coordination is especially critical for minor arterials because of the closer signal spacing. Where signals are spaced at intervals between 1/4 mile and 1 mile, they should be coordinated. Other system improvements, such as removal or phasing, must be determined on a site specific basis and should be implemented by the sponsor.

The sponsor needs to consult with appropriate staff at the UDOT Traffic Operations Center and potentially other agencies to determine where conduit is needed to improve existing and/ or future signal coordination. The sponsor should also consult with these entities to determine where timing changes and other signal system improvements would improve traffic flow.

Capacity Additions - New lanes or roads are particularly critical in high growth areas. They are also perhaps more often needed for arterials, which are designed to carry higher volumes of traffic. Without proper demand and system management, additional capacity will not prevent congestion in the long term. Hence the federal requirement for the sponsor to implement all other reasonable strategies when capacity is added.

Access Management - Access management is usually most appropriate for arterials, again because of the greater emphasis on mobility. Less aggressive control standards are desirable for minor arterials, such as driveway spacing, corner clearance, better driveway design which emphasizes through street movements, signal restrictions at private driveways, and limited turn restrictions at driveways.

The sponsor needs to develop an access management plan that balances socioeconomic impacts of access control with the primary mobility function of the minor arterial. The measures listed above need to be implemented, at a minimum, for new access. Since minor arterials are to offer a higher degree of access than principal arterials, completely limiting access is not appropriate. However, access should be encouraged on the lower of two intersecting functional classes.

Intelligent Transportation Systems (ITS) - With moderate emphasis on through movement and often significant traffic volume, ITS technologies are appropriate for minor arterials. The sponsor should use the ITS Planning Consistency Checklist to assist in identifying appropriate ITS improvements. The sponsor needs to interface as much as possible with both highway and transit elements of the regional ATMS. Much of the existing ITS infrastructure may be viewed at <http://www.wfrc.org/cms/index.php> (look under Programs/ITS).

Incident Management - Because minor arterials carry intermediate volumes of traffic, incident management programs are generally not cost effective for these facilities.

Reversible Lanes - Minor arterials are designed to accommodate a moderate level of access and consequently, turning volumes typically create too much flow conflict for reversible lanes to be feasible. However, if they are feasible, they should be considered.

Improving Intersection / Interchange Geometrics - When improving the geometrics of an intersection on a minor arterial, the engineer needs to consider both mobility and access functions of traffic. For example, more turn lanes may facilitate mobility, but other modifications may need to be added to accommodate access.

If right-of-way is available or not excessively expensive, the sponsor needs to incorporate geometric improvements at the intersections, as appropriate for the projected volumes along the project facility and intersecting streets. If signal system improvements are anticipated, geometric modifications need to be coordinated with those improvements.

DEMAND MANAGEMENT

Rideshare Programs - Rideshare programs potentially affect many trips on minor arterials connecting to principal arterials carrying work trips to the same or nearby destinations. Regional programs are in place, and consequently, no requirements are made of sponsors.

Staggered / Flexible Work Hours - The validity of this strategy is similar to that of rideshare promotion. Regional programs are in place, consequently, no requirements are made of sponsors.

Telecommuting - This strategy is regional in nature. The RTP assumes that telecommuting will increase modestly in the future. However, no significant effect has been assumed.

Growth Management / Land Use Planning - This strategy is regional in nature. The Regional Transportation Plan assumes that growth management will increase modestly in the future. However, no significant effect has been assumed.

Transit Improvements - Transit improvements are sometimes regional in nature, and sometimes facility specific. Strategies that may be appropriate for minor arterials include transit malls, transit priority systems, limited stop buses, bus transfer centers, and new routes or frequency improvements. Sponsors need to coordinate with UTA for transit improvements planned for the project section.

High Occupancy Vehicle (HOV) Lanes - HOV lanes are not appropriate for minor arterials because of their intermediate trip lengths and higher turning volumes.

Walk / Bicycle - Minor arterials are potential candidates for walk/bicycle routes. The sponsor should coordinate with local governments to ensure that existing bicycle and pedestrian routes/facilities are preserved and that planned routes/facilities are incorporated into the project. Regional bike plans may be viewed at [WFRC 2040 RTP Bicycle Base/Priority Plan Routes - Interactive Map](http://WFRC.org/Programs/Bike%20and%20Pedestrian) (look under *WFRC.org/Programs/Bike and Pedestrian* and scroll down under **BIKE AND PEDESTRIAN PLANNING, Regional Priority Bicycle Network** to find the link). If the facility is identified on the priority bike routes, then the sponsor must include appropriate and safe accommodations for bicyclists.

Employer Commute / Trip Reduction Ordinances - Trip reduction ordinances would impact minor arterials. A regional plan is needed for this strategy, but has not yet been developed.

Congestion Pricing - There are presently no likely candidates for congestion pricing.

Parking Management / Increase Parking Costs - This strategy is most appropriate on facilities leading to major employment or activity centers. Techniques vary from instituting peripheral parking to removing on-street parking. Methods such as removing on-street parking are generally more appropriate for arterials with their emphasis on through movement.

Increase Gas or Auto-Related Taxes / Fees - This strategy is regional in nature. The Regional Transportation Plan assumes that taxes and fees will continue to increase at or above historical rates.