

TRANSIT FACILITIES

Bus Routes

As previously discussed, existing bus routes maintained by Rio Metro provide good connectivity between the surrounding Pueblos and communities like Cuba and Jemez Springs with the US 550 corridor and ultimately the Rail Runner transit hub which will connect transit users with the Santa Fe and Albuquerque metropolitan areas.

Figure 17. Example of Park and Ride at Coors/Ellison



However, as development and growth continues in the City of Rio Rancho and Santa Ana Pueblo the need for more north-south corridor routes will be needed. This would include potential routes on Paseo del Volcan, Willow Creek Road/Idalia Road, NM 528, and NM 313. Additionally, as traffic demands on US 550 continue to grow, additional corridor routes along US 550 will be needed and encouraged in order to offer a modal alternative to personal vehicles to free up roadway capacity. With a goal of alleviating projected river crossing traffic demands, all of these new routes would be providing connectivity to a Park and Ride Transit Hub at a location on the west side of the river.

Park and Ride

A new park and ride facility located on the west side of the river would provide an alternative to driving a personal vehicle across the US 550 bridge, which is projected to have a daily demand of over 80,000 ADT by 2035. The new facility would not only offer connection across the Rio Grande, but would also offer a connection to the existing Rail Runner hub. The location of the new park and ride facility would depend on land availability and would preferably be land that is already owned by a governmental entity. However, the location should be located such that it will offer an attractive alternative to Rio Rancho residential developments located south of US 550 and along the Paseo del Volcan and NM 528 corridors. It is recommended that a Future Transit Plan be done that will look at projected developments in the area and come up with potential candidate locations for the park and ride facility.

Bus Rapid Transit (BRT)

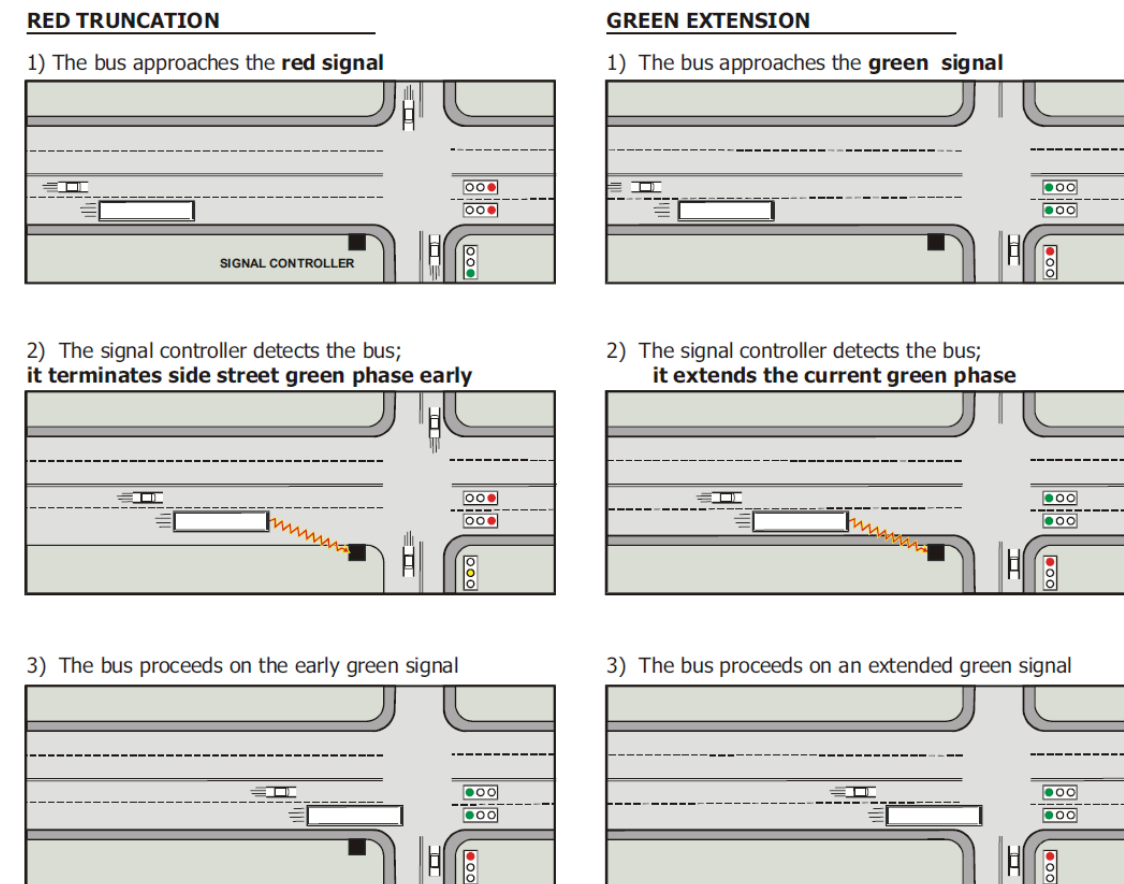
Transit can play a further part in the reduction in vehicular traffic demand on the US 550 corridor. BRT is a form of transit in which a special high capacity vehicle is able to travel on an exclusive transit lane and incorporates BRT stations that allow boarding and alighting from a platform that is

level with the BRT. Generally, the road network will also provide such amenities as Transit priority signalization and queue jump lanes.

Transit Priority is an adjustment in signal phasing in which transit is given its own green time to in effect get ahead of the platoon. This amenity can make travel times much shorter and provide an incentive for people who otherwise would drive to choose transit as their mode of transport. Getting the transit vehicle in front of the corridor platoon can further be augmented by providing what is called a queue jump lane that would be exclusive for transit vehicles only. These are sometimes implemented if there is not an exclusive transit lane provided throughout the corridor. A queue jump lane can also be used in combination with transit priority signalization. **Figure 18**, taken from the *ITE Signal Timing Manual* demonstrates transit priority strategies.

Figure 18. Transit Signal Priority

Source (ITE Signal Timing Manual)



It could be possible to prolong the construction life of a six lane section by providing a reversible counter-flow BRT or transit lane in the lighter direction commuter travel. For example, in the AM peak, three through lanes would be provided eastbound (the heavier demand) while only two through lanes are provided on the westbound direction (the lighter demand) with the third outside westbound lane designated as a transit only lane running eastbound. The reverse lane configuration would be done for the PM peak hour. It is estimated that projected traffic demands for the lighter commuter direction could accommodate a two-lane section until sometime between 2021 to 2025. Furthermore, the addition of an exclusive transit lane in the heavier direction could increase transit modal choice and reduce standard vehicular demand possibly increasing the lifetime of a six-lane section. If back access roads are also implemented, the life of the six-lane section could be further increased as discussed in the Long Term Capacity Design Alternatives Section. A reverse exclusive transit lane concept is depicted in **Figure 19**.

Figure 19. Reversible Transit/BRT Lane

