



STATEMENT OF PURPOSE AND NEED

Transportation-Related Problems in Study Corridor

The specific transportation problems in the corridor that contribute to the need for transportation improvements can be summarized as follows.

- Urban development in Cobb and Cherokee counties over the past decades has substantially increased traffic congestion on both I-75 and I-575. There are also segments of I-75 with design deficiencies that contribute to congestion and safety concerns. As a result, mobility has increasingly become difficult and time consuming for commuters and interstate travelers using I-75 and I-575 for travel within the region and Northwest Corridor. The congestion equally affects travel by autos, buses, and commercial vehicles.
- The availability of undeveloped land in the project study area and pressures for continued urbanization are projected to result in substantial increases in both population and employment, which would lead to even worse traffic congestion.
- Several major activity and employment centers are located along I-75, including downtown Atlanta, Midtown, Cumberland-Galleria, Marietta, and Town Center. The congestion on I-75 and I-575 affects access to and travel between these activity centers. Travel options other than by single-occupant auto on I-75 and I-575 are limited because of the lack of continuous high-occupancy vehicle (HOV) lanes and adequate transit connections between these centers.
- The Atlanta metropolitan area currently does not meet all of the National Ambient Air Quality Standards (NAAQS). The area has been designated as a non-attainment area for ground level ozone (smog) and fine particulate matter (PM_{2.5}) by the US Environmental Protection Agency (USEPA). Ozone is formed when volatile organic compounds (VOC) and nitrous oxides (NO_x) from vehicle emissions react under sunlight to form ozone (O₃). The combustion of fossil fuels by cars and trucks also accounts for a substantial portion of particulate matter, especially PM_{2.5}. These air quality concerns correlate to the substantial traffic congestion and regional patterns of land development.

Needs to be Addressed by Project

Transportation needs to be addressed by the alternatives are based on the transportation problems. They can be summarized as follows:

- Need to reduce congestion
- Need to improve mobility by reducing travel time and increasing reliability
- Need to improve access by improving connectivity between regional activity centers
- Need to improve safety by reducing existing roadway design deficiencies and congestion-related crashes
- Need to reduce vehicle emissions by improving vehicular travel efficiency and increasing the proportion of high-capacity vehicles