

Client: Knoxville Knox County Metropolitan Planning Commission (MPC)

Location: Knoxville, TN

CTG staff has a long history of involvement in transit planning projects in the Knoxville region under contract to the MPC for Knoxville Area Transit (KAT) and the Knoxville Regional Transportation Planning Organization (TPO) dating back to early 2000. KAT provides local, trolley, and express bus and complementary paratransit service throughout the City of Knoxville and portions of Knox County. From



May 2008 through December 2009, CTG participated in the development of the “*Knoxville Area Transit (KAT) Transit Development Plan*,” which resulted in the development of a Short-Range TDP to provide guidance for operational and capital changes over a five-year period. Over the course of the project, CTG completed the “*KAT Downtown Transit Plan*” and provided additional scheduling and operations planning services prior to the opening of the new downtown transit center, Knoxville Station.

CTG first completed the “*KAT Downtown Transit Plan*,” which focused on how best to reconfigure both the local/express routes and trolley routes to serve Knoxville Station. The challenge of the plan was to balance the needs for good access to downtown locations with the community’s desire to minimize the volume of bus traffic on downtown streets. It included an access/egress alternative for local and express bus routes designed to minimize bus volumes on historic Gay Street, but still maintain east-west bus service through downtown to Knoxville Station. Proposed modifications to the downtown trolley bus system complemented the local and express route recommendations. CTG proposed modifications to existing trolley routes and a new route to provide for easy transfers between local routes and trolley routes at Knoxville Station, while still serving a circulation function within the downtown area and between downtown and the nearby University of Tennessee campus.

In the spring of 2009, CTG began an additional work task leading up to the opening of Knoxville Station. The move to the new station involved the concurrent re-routing and scheduling of approximately 20 routes, as well as the implementation of the recommendations from the TDP. These combined activities warranted a significant change in service structure, resulting in new scheduling and interlining strategies. As each operating scenario was developed in cooperation with KAT staff, CTG monitored operating costs using an operating statistics model to ensure a “cost-neutral” impact. The scenarios also remained cognizant of KAT’s newly implemented Service Standards that include clock-headways and pulse-scheduling as well as minimum layover and recovery standards. The end result was an opening day service plan and scheduling strategy that optimized connectivity between routes, “right-sized” vehicles for the various service types (trunk line, neighborhood circulator, etc.), implemented the recommendations from the TDP, and did so with no additional operating costs. KAT successfully implemented the opening day service plan concurrent with the grand opening of Knoxville Station on August 16, 2010.