



Glen has worked in the areas of scheduling and service planning for transit agencies for the past 13 years. He has been responsible for the development of service plans, the implementation of those plans and the continual evaluation of bus service performance.

Employment History

Connetics Transportation Group, Inc.

2008-present
Associate

MARTA (Atlanta, GA)

2006-2008
Manager of Service Planning and Scheduling

Lynx (Orlando, FL)

1995-2006
Manager of Service Planning and Scheduling
Supervisor of Service Planning
Scheduling Assistant

Orange County Public Schools

1990-1995
Transportation Routing Specialist

Education

Coursework in Business Administration, Valencia Community College, Orlando, FL 1986

Professional Memberships

APTA Operations Planning Committee 1998-present

Mr. Glen Waters has 21 years of scheduling and service planning experience, with 13 of those years being at public transit agencies. Mr. Waters has extensive knowledge and hands-on experience with service planning, and has been responsible for the development of new bus route services and the reconfiguration of existing bus services at both LYNX and MARTA. He has also worked extensively with scheduling and run-cutting using TRAPEZE FX scheduling software. While at CTG, Mr. Waters' expertise has focused on Transit Development Plans (TDPs) and Comprehensive Operations Analyses (COAs) as well as specialized scheduling projects. Some representative projects Mr. Waters has managed and/or worked on with CTG include:

Northwest Arkansas Regional Planning Council (NWARPC) Transit Development Plan

In 2010, CTG was the successful bidder for a Transit Development Plan in Northwest Arkansas. Mr. Waters managed the project and completed many of its components. The plan and its analysis covered Benton and Washington Counties and its local municipalities including the University of Arkansas. Thus, analysis and recommendations were completed for both Ozark Regional Transit and Razorback Transit. Facing an anticipated loss in federal funding assistance, ridership analysis was critical to identify lesser performing trips and route segments. An onboard survey as well as a full ridecheck that accounted ridership by trip and by stop was administered. Community and stakeholder input were also solicited throughout the project. Systems-level and route-level analyses were completed for all Ozark Regional Transit and Razorback Transit routes. These analyses were used to develop service recommendations that were presented to the community through additional public outreach efforts led by CTG. Upon completion, the NWARPC was fully prepared with service plans and projected costs that could be used to assist with their pursuit of a sales tax initiative to support transit growth in the region.

Greater Lynchburg Transit Company (GLTC) Comprehensive Operations Analysis and Transit Development Plan

In 2009, CTG was contracted by the Virginia Department of Rail and Public Transportation (DRPT) to conduct a Comprehensive Operations Analysis for GLTC in Lynchburg, VA. Mr. Waters managed the COA project as well as the accompanying Transit Development Plan. Tasks included public input events, stakeholder interviews, an onboard survey and a full review of GLTC's Automatic Passenger Counter (APC) data. The APC data was thoroughly vetted for accuracy with GLTC's vendor and was later used to identify on-time performance and ridership activity. Once all of the inputs were collected, route-level and system-level analyses were completed. A route profile was developed for each service including the contracted services for Liberty University. Top performers as well as bottom performers were identified. In the end, service plans were developed to encompass three distinct time horizons – immediate near-term needs (1-3 years) to address on-time performance issues; short-range needs (4-6 years) to address the pending move to GLTC's planned intermodal station; and long-range needs (7-10 years) to meet identified growth both inside and outside of the city.

Knoxville Station Operations and Scheduling Plan

In August 2010, Knoxville Area Transit (KAT) opened a new off-street transit center in downtown Knoxville. To prepare for that move, CTG was contracted to provide scheduling support and operations planning. The move to the new station involved the concurrent re-routing and scheduling of approximately 20 routes. In addition, recommendations from the Transit Development Plan (TDP) were planned for implementation. These combined activities warranted a significant change in service structure, resulting in new scheduling and interlining strategies. A Technical Memorandum outlining scheduled pulses, interline combinations and costs (miles, hours, buses) as well as other critical operations plans was developed and successfully implemented.

Valley Metro Transit Development Plan

In 2008, CTG was contracted by the Virginia Department of Rail and Public Transportation (DRPT) to prepare Transit Development Plans (TDPs) for four small to mid-sized transit properties throughout the commonwealth. Mr. Waters was responsible for developing the TDP for Valley Metro Transit in Roanoke, VA. Elements of the TDP included an evaluation of existing ridership, service and financial performance characteristics; a peer review comparison with similar-sized transit systems; an on-board transit opinion survey; public outreach efforts to garner input from key stakeholder groups; development of goals, objectives and performance standards; identification of transit service and facility needs; an operations plan that describes how fixed route and demand response services are intended to be modified over the TDP period; a capital improvement program that describes capital programs required to carry out operations and services set forth in the TDP operating plan; and a financial plan that demonstrates how the operator plans to provide a sustainable level of transit service over the TDP planning period.

CityLink Comprehensive Operations Analysis

In 2008, CTG began work on a COA at CityLink in Peoria, IL. This study was designed to provide a thorough review of CityLink's route structure and effectiveness and develop plans to optimize existing service as well as expand into areas where demand and ridership potential is greatest. CityLink staff, including bus operators, were interviewed to identify successes and shortfalls in the system. The community was also engaged through a series of public input meetings. Key community business leaders and elected officials were interviewed to seek candid opinions regarding CityLink service. An on-board ridecheck was conducted to collect route-level and trip-level ridership data. Using the Regional Planning Commission's most recent GIS and demographic data, a latent demand analysis was also conducted. The combination of all of these efforts was pooled to create Near Term (0-2 years) and Short Range (3-5 years) service plans. Those plans were developed with full implementation in mind, providing a step-by-step means for successful cost-effective delivery.

MARTA MOVE Study and Sub-Area Service Planning Efforts

In 2006 and 2007, enjoying back-to-back budget surpluses, the MARTA Board invested in an 8% increase of bus service hours. Rather than restoring marginally performing service that had been eliminated in prior years, Mr. Waters led the effort to systematically restructure service. Eleven sub-areas were created to divide MARTA's 132 routes into more manageable zones. Route performance was reviewed to identify what areas were in need of adjustment. Automatic Passenger Counting and GIS technologies were also employed to quantify service demand. Community input was paramount with a series of Community Outreach meetings as well as a review of customer requests/concerns. Using this approach, Mr. Waters and his team were able to successfully implement some of the most significant and well-received service restructurings in MARTA's history.

MARTA SERC

Upon arrival at MARTA, Mr. Waters recognized a need to improve service coordination, particularly in areas of on-time performance and capacity challenges. He quickly formed a stakeholders group known as the SERC (Service Effectiveness Review Committee). Their goal was to bring together the unique perspectives of a variety of MARTA personnel to focus on fixed route on-time performance and capacity issues. Membership was comprised of Bus Operators, Customer Service, Dispatchers, Radio Communications, Schedulers, Service Planners and Supervision. The committee would meet monthly to identify, quantify and resolve five problematic routes at a time. The process was transparent as data would be shared at each step to ensure consensus once a revised schedule was ready to implement. In its first year alone, the SERC investigated and improved 34 routes.

LYNX Central Station Route Planning Efforts

In late 2004, LYNX opened a new intermodal transit center in Downtown Orlando. The move to the new station involved the concurrent re-routing and scheduling of 34 routes. As part of the planning efforts, feeder corridors within the downtown core were analyzed for service redundancies and better service distribution opportunities. Mr. Waters developed pulse scheduling and timed transfers for LYNX Central Station that maximized connectivity and bus bay capacities. The transition also involved extensive internal and external communications campaigns which were coordinated by Mr. Waters and on November 14, 2004, LYNX Central Station opened for business with a seamless and successful implementation.

LYNX Downtown Disney Direct Service Planning and Implementation

In 1998, LYNX operated only two routes with three daily trips to limited employment destinations within Walt Disney World. Mr. Waters developed a different service delivery approach using the same resources. The new service concept involved a feeder-distribution hub on Disney property. Routes were designed to bring employees from affordable housing in west and south Orlando and deliver them to a timed transfer point at Disney's West Side. From there, the delivery buses would become the distribution buses that would take employees to employment destinations within Disney. The new service – Downtown Disney Direct (marketed as LYNX 3-D) – started with three routes but quickly grew to five after its initial success. Today, the service has expanded to seven routes and has added trips to accommodate second shift employees.