

Thomas Wittmann, P.E.

Principal



Thomas Wittmann has more than 15 years of experience in transportation planning, specializing in transit operations and capital planning. He has worked with rural and small urban systems throughout the country. His transit operations experience includes comprehensive operational analyses, transportation development plans, optimization studies, and management performance reviews. Thomas's transit capital facilities experience includes park-and-ride feasibility studies, park-and-ride operations plans, transit center planning, and ridership forecasts. Thomas has been particularly successful in leading the public processes necessary for a successful service change implementation and has developed an iterative process that incorporates community needs and builds consensus.

EDUCATION

MS, Civil Engineering, Transportation, North Carolina State University, 1994
BA, Physics, University of Chicago, 1991

EXPERIENCE

Nelson\Nygaard Consulting Associates Inc.
Principal, 2011–Present

Thomas has managed the following efforts:

- **Fargo-Moorhead Transit Development Plan, Fargo, ND.** Thomas led an effort to address the impacts of tremendous ridership growth on the MATBUS system. New service on North Dakota State University's campus was recommended to provide high-frequency connections between campus and a large student residential area. Also, a transit core route was developed through campus.
- **Cache Valley Transit District Short-Range Transit Plan, Logan, UT.** Thomas is leading an effort to conduct a transit plan of CVTD. Better integrating Utah State University to the regional transit network is one of the primary goals of the study.
- **Bellevue-Eastgate Transit Planning, Bellevue, WA.** Thomas was responsible for the transit element of a short and long-range transit plan for the Eastgate area. One of the recommendations was to create a busway through Bellevue College's campus to remove auto/bus/pedestrian conflicts and better tie the College to the regional transit hub at Eastgate.
- **Huntsville COA, Huntsville, AL.** Thomas is leading an effort to improve the efficiency and effectiveness of Shuttle service in Huntsville. Addressing chronic on-time performance is a key element of the project.

PREVIOUS EXPERIENCE

Perteet, Inc.
Owner & Transit Division Manager, 2003-2010

Operational Analyses

Thomas has performed operational analyses for nineteen different systems throughout the country. These projects have consistently increased ridership and improved productivity as a result of his efforts. Key projects include:

- **TCAT TDP, Ithaca, NY.** Thomas developed a plan that completely restructured TCAT's fixed-route bus service. The plan recommended more direct routes to both downtown Ithaca and Cornell's campus and the creation of frequent service corridors and introduced general public demand response routes to better serve very low density areas. TCAT has been awarded APTA's system of the year partly as a result of this effort, and ridership is up dramatically since changes were implemented.

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- **Capital Metro COA, Austin, TX.** Led a multi-firm team that restructured service. Non-downtown service was optimized and integration with the University of Texas routes was promoted. Ridership has increased since initial changes occurred.
- **CATA COA, Lansing, MI.** Thomas led a team that developed long- and short-range recommendations for CATA and its services on Michigan State University's campus. On-campus route alignments were simplified as a result of the study, and the amount of intra-campus transferring was reduced.
- **SMTD COA, Springfield, IL.** Thomas led a team that simplified routes, created cross-town services, and expanded service to new growth areas. Additional service to the local University and new retail establishments were prioritized. Ridership was up 3 percent after four months.
- **Kalamazoo Metro Transit COA, Kalamazoo, MI.** Thomas was the project manager for a study that created more direct routes, reduced transferring, and created multiple focal points of service.
- **Mountain Metro COA, Colorado Springs, CO.** Thomas led a study that turned from a restructuring effort to creating plans for major service cuts. During one of the cuts, weekday service was reduced by 13 percent, yet ridership increased by 13 percent.
- **Sound Transit COA, Seattle, WA.** Thomas has led two COA's for Sound Transit. In both cases, resources from less productive routes were reinvested in strong routes, which contributed to a tremendous ridership gain.
- **South Cook - Will County Initiative, Chicago, IL.** Thomas developed the service plan to restructure service in Chicago's south suburbs. Routes were made more direct, general public demand response service was introduced in low-density areas, and additional transfer opportunities were introduced. A massive public outreach program accompanied these service plans.
- **C-TRAN Service Design/Transit Facility Design, Vancouver, WA.** Thomas led a restructuring process that met several goals, including improving efficiency and effectiveness of the service and shifting the focus of service from the downtown Vancouver transit center to two outlying transit centers. Ridership jumped by more than 30 percent after the plan was implemented.

Long-Range Transit Plans

- Long-range plans were market based, accounting for changes in population and employment patterns and the resultant travel patterns, and thus provided a framework for future system expansion. For C-Tran (Vancouver, WA), Pace (Chicago, IL), and Capital Metro (Austin, TX), high capacity transit elements were included in the long-range plans, including Bus Rapid Transit and rail services. Thomas led the effort to get C-Tran's first ever long-range plan approved.

High Capacity Transit

- For Sound Transit (Seattle, WA), Thomas has conducted preliminary route planning as well as developed routing, capital, and operating requirements for the North Corridor Alternatives Analysis. In addition, Thomas analyzed the opportunities to connect the Sounder station at Long Acres in Tukwila with the light rail station at SeaTac International Airport with various technologies (personal rapid transit; streetcar; elevated systems like Monorail or Skytrain; light rail; or bus rapid transit). Routing, capital, and O&M costs were developed for all technologies. Thomas has helped Laredo, TX complete a feasibility assessment of BRT services in four different corridors. For Pace (Chicago, IL), he examined BRT alignments using former railroad right of way to enhance mobility in the northern suburbs.

Capital Facilities

- Thomas has conducted park-and-ride capacity analyses, expanded capacity at existing park-and-rides due to restriping, and identified additional locations. Thomas developed a methodology to assess the cost-effectiveness of transit signal priority and has used this in corridors in the Puget Sound region in Washington as well as in Chicago's suburbs. Thomas has conducted operational and ridership projections for freeway in-line stations in Everett, Mountlake Terrace, and Federal Way, WA. He has led transit center capacity analyses throughout the country, including in Bellevue and Vancouver, WA.



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Public Involvement

- Thomas's service plans reflect public needs. On most service plans, Thomas leads the public input efforts, including conducting focus groups, leading advisory committees, and making presentations during public meetings. Thomas has led the public outreach process for Pace (Chicago, IL), C-Tran (Vancouver, WA), SMTD (Springfield, IL), Capital Metro (Austin, TX), TCAT (Ithaca, NY), and Intercity Transit (Olympia, WA). Listening and consensus building during each effort led to short- and long-range plans that met needs and led to increased system ridership.

AWARDS AND PUBLICATIONS

- Thomas H. Wittmann, John R. Stone, and Jonathan L. Boone, GIS Modeling of Neo Traditional Neighborhood Development, Proceedings of the 1st Congress on Computing in Civil Engineering, American Society of Civil Engineers, New York, New York, June 1994.