



Kai Monast, MRP
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PROFESSIONAL SKILLS

Research and analysis, transportation planning, training development and delivery, community and rural transportation operations and performance, data collection and management, origin/destination and route analysis, performance planning, and environmental planning

EDUCATION

- 2004 **University of North Carolina at Chapel Hill**
Master of Regional Planning (MRP); Department of City and Regional Planning
- 1999 **University of North Carolina at Chapel Hill**
Bachelor of Arts (BA); Geography, Minor in Environmental Studies

EXPERIENCE

Program Manager of the Public Transportation Group, *Institute for Transportation Research and Education, North Carolina State University*

- Responsible for assisting community transportation systems in North Carolina with technology implementations, operational improvements, planning for the future, and training;
- Performs comprehensive community transportation planning and performance analysis through the development of individual system performance plans and in-depth origin/destination analyses;
- Develops service delivery improvement plans consisting of origin/destination analysis, fixed route service area analysis, financial analysis, coordination options, and business practice improvement recommendations;
- Works with the community transportation systems to improve performance through site visits, interviews, assessments, and data analysis;
- Understands various transit modes and recommends modes for local transit systems to improve performance and meet community needs;
- Develops policies and plans for transit system technology implementations;
- Develops and teaching transit specific courses for online and in-person delivery, including dispatching, scheduling, using data, policies and practices, billing, and service delivery models;
- Collects, analyzes, and develops reports for bi-annual vehicle utilization data for 80 transit systems;
- Collects, analyzes, and develops reports for annual Operating Statistics for 99 urban and rural transit systems;
- Primary reporter of rural National Transit Database statistics for the State of North Carolina;
- Provides technical support for scheduling software developed by ITRE
- Performs other data analysis, mapping, and applied research for other transit-related as necessary.

Current Development Planner, *Town of Chapel Hill, NC*

- Helping the public and developers understand the Land Use Management Ordinance;
- Working closely with developers and other departments to analyze and review both large and small projects;
- Writing memorandums for public review boards;
- Assisting with presentations;
- Creating a new organization database system for tracking thousands of projects and land management records;
- Developing new, streamlined procedures that reduce the amount of processing time for applications.

Senior Planner, Town of Cary, NC

- Responsible for updating the Future Land Use Plan and the associated Future Land Use Map;
- Assisting in small area planning;
- Assisting in selecting and managing the contractor for Low Impact Development pilot study;
- Authored study on the impacts of creating a train safety corridor.

Senior Planner II, City of Key West, FL

- Performing all work necessary for Key West to become a Multimodal Transportation District that places a priority on bicycling, walking, and other alternative transportation modes;
- Staff liaison to the pedestrian action committee;
- Authoring and proposing amendments to the Comprehensive Plan;
- Studying the economic and transportation effects of evolving market conditions, using and maintaining the City's GIS;
- Managing transportation data collections, analyzing the results, and authoring reports;
- Working as an information manager at the Emergency Operations Center during hurricanes;
- Conducting development review for large and small projects;
- Making presentations to the City Commission, Planning Board, and citizen groups;
- Providing assistance to local and regional transportation agencies.

Research Associate, University of North Carolina at Chapel Hill

- Assessed the benefits of Incident Management Assistance Patrols in collaboration with the North Carolina Dept. of Transportation. Tasks include:
- Using GIS to locate and analyze crashes on freeways;
- Researching other ITS innovations;
- Statistical analysis of crashes;
- Helping to create a tool for placing patrols in the future;
- Writing a paper and presenting at the Transportation Research Board conference.

Research Associate, Institute for Transportation Research and Education, North Carolina State University

- Worked to improve public transit across the state of North Carolina by:
- Designing software for transportation systems;
- Providing technical support and customization for the software;
- Helping systems analyze their routes using GIS and statistics;
- Teaching courses on how to use new technologies;
- Editing and writing, researching and disseminating information about ITS solutions;
- Making presentations at national and state conferences for transit professionals.

PUBLICATIONS

- Monast et. al. *Economic Benefits of Transit in North Carolina*, NCDOT (2015)
- *Applying Structured Scheduling to Increase Performance in Rural Demand-Response Transportation*, Journal of Public Transportation Volume 15, No. 3 (2012)
- *Operating Assistance Reporting*, NCDOT (2011)
- *Implementing a Benchmarking Process at North Carolina Transit Systems*, NCDOT (2010)
- *Alternative Fuels in Transit*, NCDOT (2008)
- *The Impacts of Basic Rural Paratransit Characteristics on Organizational Culture*, Transportation Research Board (2010)
- *Methodology for Prioritizing and Expanding Freeway Service Patrols*, TRB Paper 04-2580, Transportation Research Board (2004):
- Graduate Research Project: *Neighborhood Quality Assessment; an online tool for evaluating the built environment*

PROFESSIONAL SKILLS

- Business Plan Development for Durham Council for Senior Citizens (2010)- studied transit demand, compared to available modes, and developed a plan to enhance mobility options for seniors
- Faculty member for Community Transportation Association of America (CTAA) Nebraska Institute for Transportation Coordination, Kearney Nebraska. March 2009
- Presentation at National Transit Trainers Workshop (2009)
- Presentations based on original research at the annual Transportation Research Board conference held in Washington DC (2004, 2008, 2009, 2010, 2011, 2012)
- Presentations at the Community Transportation Association of America Conference (2000 and 2001)
- Presentations at the North Carolina Rural Transportation Operators conference (2001, 2007, 2008, 2009, 2010)
- Presentations at the North Carolina Public Transportation Association conference (2007, 2008, 2009)
- Primary author of long range multimodal transportation plan for City of Key West, FL, which was adopted through a public process in 2005
- Primary author on transportation and economic development reports in Key West, FL
- Teaching and developing curricula, including the Paratransit Foundations distance-learning courses
- Ability to understand and analyze large amounts of transit data
- Geographic Information Systems using ArcGIS and MapInfo
- Programming and developing software using MS Access
- Website development
- Familiar with different Automated Scheduling and Routing Software, Mobile Data Computers, and other transit ITS solutions and requirements for their successful implementation

AFFILIATIONS

- Member of the Transportation Research Board Paratransit Committee (2010-present)
- Secretary to the Legislative Committee of the North Carolina Chapter of the American Planning Association (2006-2008)
- Professionally Certified by the American Institute of Certified Planners (2006-current)
- Member of American Planning Association (2006-current)
- Delegate for UNC Graduate Student Senate and Undergraduate Student Congress

AWARDS/NOMINATIONS

- Nominated for NCSU Research and Graduate Studies Division Awards for Excellence (2009)
- Nominated for the National Transit Institute's Achievements in Transit Training Model Training Award (2008 and 2009)
- Carolina Environmental Program Student Fellow (UNC, 1999)

VOLUNTEERING

- Provides transportation service delivery and technical assistance to the Lincoln Community Health Center, a non-profit community health clinic in Durham, NC
- Special Olympics
- Ronald McDonald House
- Food Bank of North Carolina