



Wayne Gibson, Communications Engineer

Membership: Institute of Electrical and Electronics Engineers (IEEE)

Education: B.S. in Computer Engineering, Drexel University, 2014

Wayne supports KMJ's technology-focused activities including, helpdesk and training for regional and national clients. His strong communications skills are essential when explaining complex technical concepts to clients in a clear and understandable manner. Wayne has planned, designed, and optimized cost effective and adaptable 3G and 4G wireless networks. Wayne has simulated network performance with radio frequency (RF) propagation software (ATOLL) and has coordinated new fiber backhaul for various elements within the network. Wayne is dynamic, attentive, and diligent.

Relevant Communications Projects

His overall responsibilities included: planning, design, and optimization. These are some notable excerpts:

- Initiate search areas for new cellular solutions for additional coverage or capacity
- Design new solutions or re-design existing infrastructure for better performance
- Optimize new solutions to best fit the existing network
- Reconfigure and optimize existing solutions for network growth
- **Create a backhaul fiber deployment map for Bucks, Berks, Chester, Delaware, and Montgomery Counties**
- Meet with vendors and select equipment for cellular solutions
- Provide guidance to accommodate design concerns that occur during construction phase
- Design small cell solutions to serve a dense concentration of users
- Coordinate aesthetically pleasing equipment design styles with vendors

He worked on the wireless infrastructure for the **2014 Philadelphia Papal Visit and the 2017 NFL Draft.**

Relevant Transportation Projects

- **Pennsylvania Department of Transportation 4400004480 Capital Planning Tool Hosting, Support & Maintenance** – Technical specialist responsible for visual design techniques to train and educate users of the Capital Planning Tool in a compelling and efficient manner. KMJ's experience with transportation-related software documentation and support will assist in creating a rich, intuitive guide for users of the Capital Planning Tool. This application allows agencies to manage and visualize assets, asset replacement policies, funding sources, and other key components in the capital planning process. (2018-2019)
- **Pennsylvania Turnpike Commission Work Zone Reservation and Traveler Information System Concept of Operations, Requirements, and Request for Proposal** – Technical specialist responsible for coordinating interviews, and a web workshop with Smart Belt Coalition (SBC) member

agencies to obtain input from these agencies on their existing processes and plans. Meetings were held both in-person and via web using Adobe Suite applications to maximize participation. The Pennsylvania Turnpike Commission is working to improve management of work zones through this project and sought input from the other agencies within the Smart Belt Coalition. (2018-2020)

- **National Performance Management Research Data Set (NPMRDS)** – Technical specialist responsible for Tier I support, including responding to technical support questions ranging from data access to HPMS conflation and data validation, NHS/shapefile coverage, and MAP-21 PM3 issues. Fields 10 to 15 support requests per day and most are resolved within minutes – well under the 48-hour contract requirement. Is responsible for coordination of data access including the data sharing agreement process and development of the NPMRDS quick start guide. (2017-2022)
- **I-95 Corridor Coalition Program Management, Administrative and Technical Support for the Vehicle Probe Project** – Responsible for pioneering, maintaining, and troubleshooting Adobe Connect and Adobe Events as a web conferencing tool. Administered polling questions to provide support to Coalition staff and members, comprised of DOTs and MPOs. Organizes and conducts webcasts through Adobe Suite applications for the member agencies on a variety of topics to provide a forum for exchange related to agency operations activities. (2004-2019)