



Automated Vehicle Location System

Location: Jacksonville, Fla.

Client: Jacksonville Electric Authority (JEA)

PROJECT SUMMARY

Burns & McDonnell assists Jacksonville Electric Authority (JEA) in technology research in several areas, including asset and vehicle location. Burns & McDonnell was tasked with providing advanced technology research, support and program management for JEA. One of the most recent projects is for an asset tracking system, or automated vehicle location (AVL) system. Every technology research project completed at JEA follows specific phases of development. These phases can be broken down:

- Research and design
- Benchmarking criteria development
- Request for proposal (RFP) development
- RFP management
- Pilot management
- Full deployment support

Burns & McDonnell's first assignment was the research and benchmarking phases for a simple AVL system. Due to interest from the City of Jacksonville for a similar system, increased support from both the city and JEA, and additional requests by stakeholders within JEA, a new research project for a more advanced system is under way to increase the sophistication of the AVL system and include the city. Burns & McDonnell is working with JEA and the City of Jacksonville to develop a state-of-the-art AVL system that integrates multiple individual systems. The theory behind the system is that the organizations have distinct needs but share many needs. By integrating the systems, the infrastructure functionality and costs can be shared. The system will allow the organizations to share data in a secured environment. Some location data is sensitive and will not be shared.

Specific tasks performed under the project:

- Develop an engineer's estimate that is within 25 percent above or below real-world deployment costs to determine the budget necessary to deploy such a system.
- Prepare a detailed functional and technical requirements for the solutions.
- Obtain and review third-party vendor and point solution pricing.
- Tabulate hardware and software costs associated with vendor point solutions.
- Assess costs associated with the installation and integration of various vendor point solutions into JEA's information technology (IT) processes, systems and workflows.
- Identify support pricing for ongoing maintenance and upkeep of deployed solutions.
- Determine the extent of integration services and related pricing.
- Develop a report for the real-time mobile asset management research project that includes:
 - A general summary of each functional requirement.
 - An explanation of value-added solution compared to JEA's current environment.
 - Present research findings to JEA orally and written.

SERVICES PROVIDED

- Needs assessment
- Research
- Benchmarking
- Design criteria
- Program management

