emprata

THE CHALLENGE

CITE investigates complex transportation, infrastructure, and environmental problems and assists in developing approaches for alleviating these issues. One area where CITE focuses their research is the freight sector, which is a major contributor to traffic congestion in urban areas. To help address this problem, CITE has developed mathematical models for assessing freight congestion which can be used by city planners to better assess and accommodate freight activity. However, while the models are state of the art, the interface for the FASTGS software was outdated, and Emprata was contracted by RPI to revamp the system and develop additional functionalities.
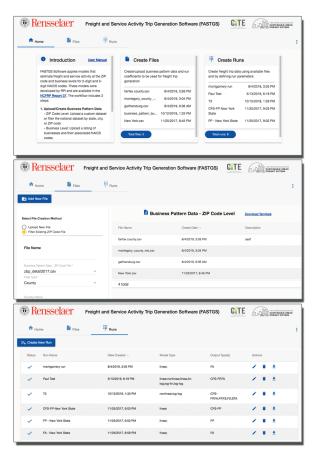
OUR SOLUTION AND RESULTS

Emprata modernized the FASTGS software with a user-friendly interface, a more intuitive workflow, and the ability to run different scenarios based on user-defined parameters.

Our team worked closely with RPI throughout the development process in order to:

- Learn the business rules and logic, review the legacy FASTGS system, and understand the underlying models (e.g., inputs needed, types of data files, expected outputs)
- Use workflow modeling to design a plan for revitalizing the software, including a smoother user experience, a simplified methodology for uploading and exporting data, and capabilities for data filtering and aggregation (e.g., by ZIP Code)
- Implement the plan, drawing from the knowledge and experience of Emprata's developers and system architects in the areas of UI/UX design, backend processing, software prototyping, the integration of enterprise applications, and the reengineering of legacy systems to improve their performance and viability