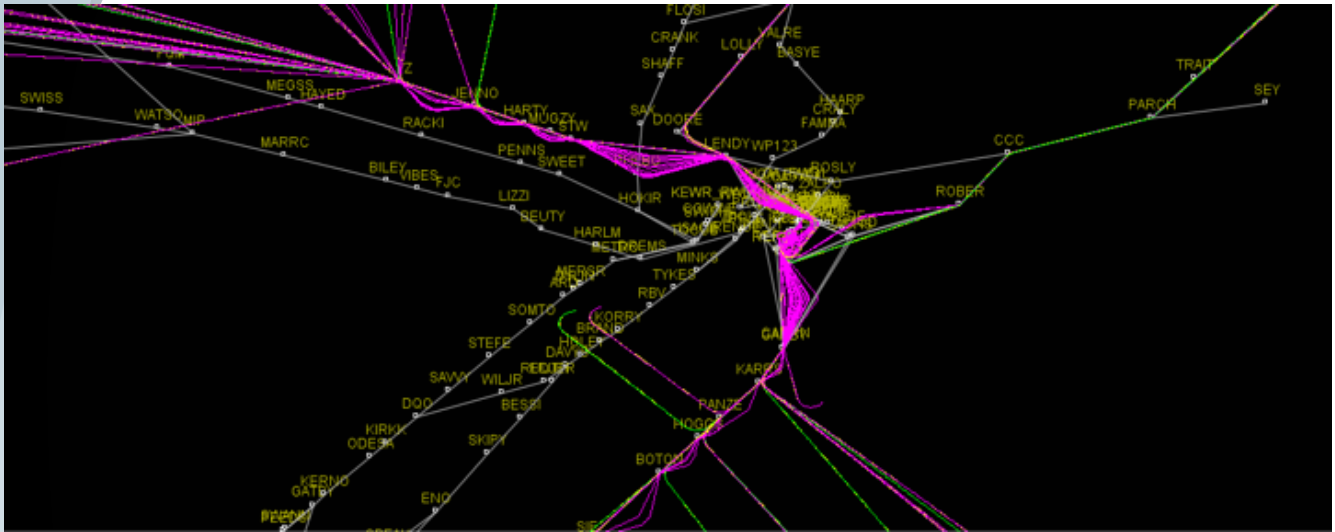


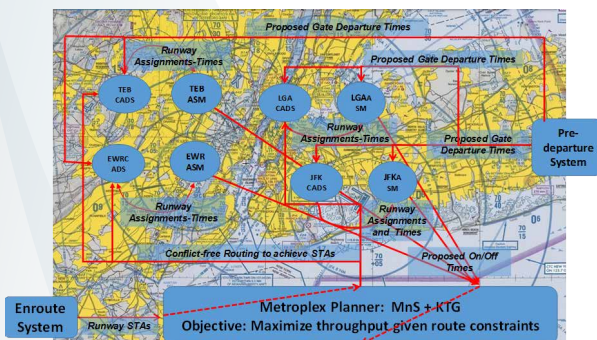
MetroSim

Arrival, Departure, and Surface Operations in a Metroplex

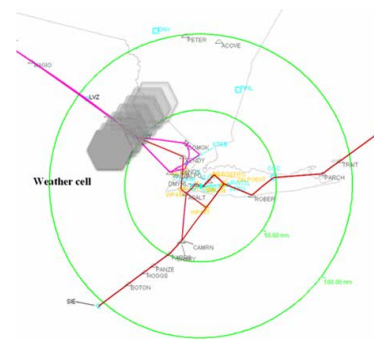


Managing arrival, departure, and surface operations efficiently within a Metroplex is one of the goals of Integrated Arrival and Departure Scheduling (IADS). MetroSim is an analysis engine that is used to study different IADS algorithms as well as the effect of different airspace designs and airport geometries on arriving, departing, and surface traffic. Its software architecture mirrors the NAS: there are separate software modules for managing the surface traffic at each airport, the arrival and departure flow, and the airspace within the Metroplex's region of control. MetroSim has been used to study:

- The impact of continuous descent arrivals on airport throughput and noise impact
- Surface congestion due to Reduced Oceanic Separation (ROS) over the North Atlantic Traffic System
- The impact of additional runways in a Metroplex on its overall traffic flow, throughput, noise profile, and surface congestion
- Convective weather impact on coordinated arrival/departure/surface management
- The overall impact of arrival, departure, and surface management coordinated throughout all airports in a Metroplex



JFK and LGA Arrival Routes in MetroSim



MetroSim System Architecture

For information about MetroSim, please contact Goutam Satapathy, Sr Director at goutam@i-a-i.com.

