

I3 Systems Use Case

Smarter Parking Systems

Current Operations: Many parking lot owners have deployed applications that allow consumers to check out parking lot occupancy rates before they go to the parking lot only to be disappointed when the lot is full. When a person finds their favorite lot is occupied, they are expected to either browse the internet to check out other parking lots, roll the dice, and hope they can find a parking space when they get to their destination, or perhaps give up and cancel their plans.

Issues: People do not want to surf the web to determine the parking options at a targeted destination; finding a desired parking option should not be a chore. However, different parking lots have independently selected different technologies to improve the customer experience with their lot, but these systems generate different kinds of information. Excluding private parking options, even city-owned options use independent technology systems for parking support and in some cases have outsourced management of their parking options. This makes it extremely difficult to create an information system that is able to integrate data from many different parking lots operated by different vendors, and different technologies which is what is needed to spur economic growth in areas that are parking challenged.

Solution: i3 Systems has created a next-generation information management network designed to integrate information from many sources, many owners, and many different formats into a common information structure. The City of Los Angeles has developed an application that uses the capabilities of an i3-empowered infrastructure to create a composite map of parking options in the Los Angeles area. In Los Angeles, people will be able to pull up a single site and see all parking options near their destination – a great convenience for the citizens of Los Angeles. The application also serves to more evenly spread parking around a neighborhood which can be a problem when neighborhood parking options are tightly clustered in a single neighborhood while nearby options are left unoccupied.

Benefit: The i3 information network architecture was designed with the specific intention of serving as a bridge between public and private information suppliers. An information-centric infrastructure that is able to integrate public and private information sources to create a systemic view of the available information must enable an environment where private information owners are encouraged to collaborate with public information owners for the collective good. The creation of such an environment requires that the private information owners retain control over the information they provide to government entities. This level of control ensures that both private and public information owners are treated as collaborative peers thereby avoiding the situation where government entities have the ability to assert direct control of privately generated information. This type of an information-based collaboration establishes a bilateral relationship between the city and multiple information owners which is important to the creation of an information exchange for the mutual benefit of the involved parties.

Status: The City of Los Angeles Information Technology Agency (ITA) developed its smart parking application on top of an i3-based information network. Application development efforts are complete and the City is in the process of certifying the application for regional deployment. The City anticipates that once deployed, the application will serve to aid in the economic growth of parking-challenged neighborhoods, improve local air quality, and reduce traffic congestion. Ultimately, such tools will become important as the City readies itself to support the Olympics in 2028.