Intellistreets

Intellistreets is a wireless light pole-based intelligent control system that provides developers, urban planners and city officials with powerful new tools to enhance public safety, inform residents and visitors, and connect commercial, residential, hospitality and entertainment components. With light poles as its foundation, the Intellistreets system takes advantage of the vast amount of existing infrastructure in cities around the world to transform urban corridors into environments that promote vitality, safety and economic development.

Invented by Illuminating Concepts, the Intellistreets system can control and schedule functions such as lighting and audio, and adapt to changes in the environment without human intervention. If a light pole is damaged, neighboring light poles can route around the damage and continue to function. If communication throughout the system is disrupted, each light pole can function independently. The Intellistreets system has the ability to learn over time, allowing unprecedented flexibility and automation. As the only wireless audio system in the market, Intellistreets eliminates the costs of wiring, cabling and conduit. Self-diagnostics keep maintenance costs lower.

The Intellistreets system operates on a single, low-cost scalable wireless network on one Common Operating Platform. Communication is provided between each light pole and from each light pole back to an interface server. The mesh nature of the wireless network enables the network to remain highly resilient and flexible.

Lighting is variable for energy conservation and theming, reacting to natural light, the environment, and wireless commands. Sensors monitor foot and vehicle traffic. LED screens replace static vinyl banners typically attached to light poles. Intellistreets can transmit information for emergency alerts and indicate evacuation routes, Amber Alert warnings or hazardous environment alerts. Intellistreets is the only streetlight system with embedded emergency call buttons and two-way hands-free communication.

A concealed speaker within the base of each light pole provides 360-degree dispersion audio for background music, paging and announcements, emergency alert information, and even sirens through audio, sequenced lights and graphic banners. Intellistreets facilitates the use of radio broadcast from playlists. A drag-and-drop interface acts much like iTunes or any similar handheld mp3/video player. In addition, holiday themes or other special programming can be temporarily integrated.

The Intellistreets system features controllable and programmable lighting capabilities, including dimming and load-shedding. Lighting can be scheduled, and can react to ambient light levels in real-time. Significant energy savings are achieved by providing only the necessary amount of light at any given time, up to 70% over conventional lighting. Lamp life is extended to a minimum 10 years—50 percent over competitors.

Farmington Hills is the first site in the world to feature the Intellistreets system.

The Intellistreets system offers the ability to add digital video signage in the form of a large LED banner to a light pole with still images and video. A wide range of sensors can be added to the Intellistreets system, including weather and environmental sensors, toxic gas, radiation and other atmospheric monitoring and alert systems. Footfall sensors can gather and relay valuable information regarding pedestrian traffic. This data can be intelligently shared between poles to enable the system to adapt and react by itself, as well as enabling advanced reporting functionality as an adjunct to Homeland Security, emergency management and municipal operations.

Illuminating Concepts’ proprietary IntelliFX is a user-friendly Web-based control system that allows city security, service and safety personnel to coordinate events, make immediate decisions based on real-time data, create and monitor daily schedules, and offer special seasonal themes as needed. The highly customized IntelliFX interface can be broken up into districts or individual streets.

Future features include downloadable maps and digital information packets for visitors, parking-meter capabilities, and a portal to recharge hybrid or electric cars.
A solution for every street...