# San Leandro: A Smart City Model

# **Project Overview**

The San Leandro Smart City Initiative recognizes the critical role of government in developing and maintaining a healthy, connected ecosystem in which its residents, businesses and visitors can thrive. Building on the Lit San Leandro (LitSL) public/private partnership that has created an existing and expanding 10-gigabit fiber optic network, San Leandro is poised to leverage that digital infrastructure to transform our City into a vibrant digital society.



# San Leandro possesses the critical ingredients required for creating a model, sustainable and digitally connected City:

- · Leaders who inspire and pursue economic, social and environmental sustainability;
- A city government, business leaders, and community residents who collaborate to identify solutions;
- A proven ability to leverage existing resources through innovation and technology to improve services and reduce costs; and
- A commitment to intentionally nurture an engaged and vibrant digital society that strengthens our social capital and stimulates digital inclusion.

# The digital foundation we've laid to date includes:

 Development of a public/private partnership, called Lit San Leandro (LitSL), that created an 11.5 mile, 10 gigabit per second fiber optic network to stimulate economic development and create jobs.



- An additional \$4.2 million investment by the **Economic Development Administration and the City of San Leandro** added 7.5 miles of new conduit to the City's fiber optic infrastructure in 2014.
- Over 140 businesses, co-working and incubator spaces in two cities (San Leandro and Berkeley) are now connected to the LitSL network, totaling 3 million square feet (s.f.) of commercial building space.
- Attraction of hundreds of thousands of dollars of reinvestment into a former Dodge/Chrysler automotive plant to create a 350,000 s.f. technology center for advanced manufacturing, known as "The Gate". The Gate, connected to LitSL in May of 2013 and only one-third leased, today is almost fully leased with an average 50% increase in new lease rates. The recent launch of the Bay Area Advanced Manufacturing (BAAM) hub at The Gate represents the largest collaborative hub of 3D printing-related companies under one roof anywhere in the world.
- Tour of The Gate by Democratic Whip Steny Hoyer and Congresswoman Barbara Lee in October 2014 in recognition of The Gate as a model for the creation of new manufacturing jobs for Americans and hope for restoring the American middle class.
- Partnership with U.S. Ignite, a White House program with a mission to "ignite" the development and deployment of new gigabit apps designed to have a profound impact on how Americans work, live, learn and play. In a 2013 competition sponsored by Ignite's partner, Mozilla Ignite, the City's team took a first place prize in a gigabit fiber application: Remote Process Control.
- Recognition of San Leandro's digital and economic transformation through dozens of publications, including the Wall Street Journal, San Francisco Business Times, Fortune, CBS News, Forbes and many others. Lit San Leandro received a 2013 "Real Estate Deal of the Year Award" by the San Francisco Business Times in the category of "Infrastructure/Public-Private Partnerships".
- Partnership with **OSIsoft** to enable transparency of building HVAC and utility data for all municipal facilities, providing tools to increase building energy efficiencies and reduce costs.



# Plans for the Future — A "Connected" City

The next phase of San Leandro's Smart City Initiative is to fully utilize "the internet of things", expanding

wi-fi access, using sensors and open data to increase engagement with community stakeholders, and continuing to expand connections enabled by LitSL. San Leandro is becoming a model for innovation and responsiveness, focused on the following initiatives:

#### **Addressing the Digital Divide**

San Leandro's main library is connected to LitSL, providing fast internet connectivity for community residents with limited access. The City is preparing to launch free City-wide wi-fi with the installation of its first Downtown access point.



Providing fast and free public internet access represents a significant milestone in our efforts to enable a level digital playing field for all San Leandro stakeholders.

#### **Innovation in Education**

The City is partnering with San Leandro Unified School District to link each of its facilities to a dedicated, City-owned 10 gbps fiber optic internet connection. These fast connections will enable students, parents teachers and other education stakeholders to realize new ways of learning; with access to endless research opportunities and increased collaboration, communication, connections; ability to discover, create, design and build; and improve research tools for the next step, whether college, internships, jobs.

# **Smart Traffic Control and Parking**

San Leandro already has made use of a fiber optic backbone to monitor traffic patterns, maximize the efficiency of traffic signals, and review accident data to improve traffic safety. The next stage is to acquire and implement an adaptive traffic control system that continuously monitors, learns, predicts, and responds to traffic demands and conditions with optimal signal timing for prevailing conditions. Implementation of an advanced parking management system with new meters, sensors and demand-responsive pricing will make it easier to find parking in our fast-growing City.

### **Emergency Preparedness**

By increasing the ability of the Police and Fire Departments to access data quickly and communicate with regional agencies and health facilities, San Leandro will be far better prepared to respond to an emergency or natural disaster. The Smart City initiative also includes the installation of a dedicated public safety Wi-Fi network to ensure that first responders are always connected.

#### **Funding Request**

San Leandro already has leveraged \$15 million in public and private funds to develop a fiber network and the first stages of the Smart City Initiative. To move to the next phase, the City estimates that another \$5 million will be required to implement City-wide wi-fi for the community and public safety, smart traffic and parking systems, and to support an effective open data portal.

