

***A.1. Investment (Project) Region** Identify and describe the region where the project will be located, identify and describe the region that will benefit from the project and discuss the project's expected economic impact.*

The **City of San Leandro** has a long history as a manufacturing hub. In the early 1900's agriculture-related factories began popping up in former cherry fields along the rail lines, including what would later become the Caterpillar Tractor Company. However it was not until World War II, that San Leandro became a major manufacturing center. The transformation of San Leandro into an industrial center was no accident; critical investments in infrastructure including sewer, water, power, streets and rail, positioned San Leandro to attract postwar capital flows. San Leandro, between 1948 and 1957 alone, gained 15,000 industrial jobs and over \$130 million in capital investments.

Times have changed; traditional manufacturing businesses have departed California for cheaper land, labor and energy. The City's industrial area has generally fared well and San Leandro remains home to food manufacturers such as Ghirardelli Chocolate, specialty manufacturers such as Precision Foundry, ACCO Engineering as well as clean-tech manufacturers such as Energy Recovery Inc. and Cleaire. That said, many properties are underutilized and ripe for repositioning. The City presently has about 500,000 square feet of vacant industrial building space and about 1.4 million vacant square feet of warehouse space.<sup>1</sup> The vacancy is the result of the economic recession as well as off-shoring patterns in manufacturing.

Although the nature of industrial production is transitioning, the City's commitment to industrial activity has remained strong. Unlike many neighboring communities, San Leandro has resisted the temptation to convert industrial areas to residential uses. About 25% of the City's land area, representing approximately 4 square miles, is zoned industrial. With a strategic location near an international airport, one of the largest ports on the west coast, as well as the skilled Bay Area workforce, San Leandro is poised to capitalize on 21st century manufacturing and technology growth opportunities.

To realize these opportunities, San Leandro must once again make an investment in infrastructure—this time to provide high speed broadband connectivity. In early 2012, the City of San Leandro developed a Broadband Strategy to guide project priorities and investments. A primary conclusion of the Broadband Strategy is that a lack of broadband availability in San Leandro's industrial areas is inhibiting successful re-use of many properties.

Modern industrial trends such as rapid prototyping, medical imaging, and 3D printing, to name a few, require high-speed connectivity that is frequently unavailable in the United States. Implementation of Lit San Leandro will allow the City to embark on a program of technology-led development and provide support for the industries that will be driving job creation in the coming decades. Lit San Leandro, the fiber optic broadband network that is the subject of this application, is expected to provide a key (and presently missing) ingredient needed to spur private investment in the City's industrial areas. As a result, underutilized warehouses and manufacturing spaces will be transitioned to support the high-tech, high-wage jobs of today's modern industrial economy.

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<sup>1</sup> Cornish and Carey Commercial, 2011.

The expansion of Lit San Leandro will support the City in repositioning its industrial land and creating jobs by attracting new companies and supporting the growth of businesses in San Leandro with bandwidth and speeds that are nearly unprecedented in the United States.

Although industrial uses are a primary economic driver for the City, office uses have been expanding in recent years. A 250,000 square foot Class-A office complex was recently completed downtown and is now fully occupied. As noted in the following section, major office developments are planned, both downtown and on the City's shoreline. Obviously, these types of development also stand to benefit from the availability of extremely fast broadband access.

### **Economic Impact:**

The expansion of Lit San Leandro, which is described in more detail in section A.2, is expected to have a sizable impact on job creation.

**OSIsoft, Inc.**, one of the City's largest private employers, is planning to maintain its headquarters in San Leandro specifically because Lit San Leandro has delivered the bandwidth that the company needs. The company's president initiated the Lit San Leandro project because adequate bandwidth was not available from any other provider in San Leandro. Over **300 jobs will therefore remain** in the City due to this project and, without Lit San Leandro, OSIsoft's viability in San Leandro would be threatened.

Lit San Leandro has also made possible the San Leandro Crossings project: a mixed-use, transit-oriented development adjacent to the Downtown San Leandro Bay Area Rapid Transit (BART) station and the OSIsoft headquarters. The Crossings project will include two 100,000 square-foot office buildings, and will attract roughly 1,000 high quality jobs (assuming 200 sq. ft. per employee). Of that growth, **200 new jobs** will be hired by OSIsoft as part of their expansion plans and can be attributed to the proposed system expansion. The San Leandro Crossings project will benefit both from the initial buildout of the fiber loop and the proposed expansion segments which will facilitate network connections to satellite offices and other businesses that use the Lit San Leandro system. Because OSIsoft serves as a hub for Lit San Leandro's connection to the outside world, the company stands to benefit directly from the system expansion. Assuming a cost of \$300 per square foot of building space, this equates to an investment of \$60 million.

The expansion of Lit San Leandro is also vital to the development of a portion of the City's blighted shoreline area. The City has been working with **Cal-Coast**, a master developer, for the past three years on a shoreline project that will include 250,000 square feet of office space, a 225-room hotel, and a conference center, leading to the creation of approximately **1,660 jobs**. (please see support letter from Cal-Coast for methodology). Assuming a construction cost of \$350 per square foot of building space, this equates to an investment of approximately \$150,000,000. Both the jobs and investment estimates do not include the residential component of the project. Although the residential development would likely be viable without the fiber access, it should be noted that this component of the project will benefit from access to Lit San Leandro as well.

**Reynolds & Brown** is a major property development and management firm within the Bay Area. Staff from Reynolds & Brown approached City staff in 2011 to report difficulties acquiring commercial grade broadband service at many of their properties. Largely as a result of this difficulty, several office, industrial, and flex properties have remained vacant for some time. As detailed in the support letter from Reynolds & Brown, it is reasonable to assume that **50 new jobs** could be generated by the proposed Lit San Leandro expansion because it will provide

service to several of these properties. This estimate is based on 27,000 square feet of vacant property adjacent to the proposed fiber expansion segments and an assumed employment density of 500 square feet per employee for industrial and flex space.

Additional incremental job growth resulting from businesses that choose to relocate and initiate operations close to the expanded fiber loop is more difficult to estimate. Although almost any type of business can benefit from increased bandwidth, industries that are dependent on high-volume data transfers include media and entertainment (particularly video), image processing such as photography or graphics, 3D printing, custom manufacturing, telecommunications, architects, and engineers. Medical image processing is particularly data-intensive. A Kaiser Permanente Medical Center is currently under construction and San Leandro which will employ over 2,500 beginning in 2014. Kaiser is interested in connecting to the fiber loop, and the project also has the potential to help create a medical services cluster in San Leandro. Changes in medical imaging technology are requiring more and more bandwidth for coordinated healthcare, and Lit San Leandro would certainly be of benefit to those companies.

Currently over 950 existing businesses are located within 200 meters of the proposed expansion. Those businesses employ over 8,300 people and many will become more viable and productive as a result of the project.

*City staff believes that a conservative estimate is that in 3 years, the expansion of Lit San Leandro will result in the creation of 3,000 jobs or more. This estimate includes the San Leandro Crossings and Shoreline developments, as well as incremental growth from smaller companies, particularly in our industrial areas. Six years after construction, that figure could expand to 4,000 jobs, and after nine years, 5,000 jobs would be a reasonable estimate.*

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**A.2. Investment (Project) Description** Provide a detailed description of the complete scope of work for the proposed EDA investment.

***“To attract new businesses to our shores, we need the fastest, most reliable ways to move people, goods, and information -- from high-speed rail to high-speed Internet,”***  
- President Barack Obama, 2011 State of the Union Address

Dr. J. Patrick Kennedy, CEO and founder of San Leandro's OSIssoft, approached the City in 2011 with a proposal to install a high-speed fiber optic network that will support modern businesses and enable the city to attract next generation enterprises and jobs. The fiber installation is being undertaken by San Leandro Dark Fiber and the project is named **Lit San Leandro**.

In this important public/private partnership, San Leandro Dark Fiber is investing \$3 million in private money to install a state-of-the-art digital backbone loop of fiber optics within an existing City-owned 11-mile loop of buried conduit. This partnership allows San Leandro Dark Fiber to benefit from the City's infrastructure investment while the City and business community benefit from a substantial private investment for the fiber installation.

The digital network will be connected to the outside world via a connection to the BART Telecommunications fiber optic infrastructure that runs through San Leandro and onto the information superhighway. Businesses wishing to take advantage of the system will be able to

lease a strand or more of fiber from San Leandro Dark Fiber enabling access bandwidth levels not offered by the traditional carriers.

The bandwidth and connection speeds offered by a dedicated fiber connection dwarf anything that could be acquired from a traditional internet service provider. For context, consider the following:

- A basic connection to Lit San Leandro would offer speeds of 10 gigabits per second (Gbps). For comparison, the average connection speed in the United States is 5.8 megabits per second (Mbps). Lit San Leandro is 1,700 times faster than the typical connection.
- As an example, a map of a human genome is about 100 gigabytes. Transferring this file with an average connection would take 70 hours. Transferring with Lit San Leandro would take a little over an hour.
- Comcast Internet is generally the preferred option for businesses in San Leandro at this time. Lit San Leandro is 100 times faster than the maximum speed offered by Comcast – and that service is unavailable in much of San Leandro.

For another point of context, Chattanooga, Tennessee recently completed a fiber optic network and presently claims to be the only city in the Western Hemisphere offering connection speeds of 1 Gbps.<sup>2</sup> The first segments of the initial 11-mile Lit San Leandro fiber loop were installed in early 2012 and the system went live in March. Two businesses are currently connected to the system and are enjoying the bandwidth. Given the magnitude of this technological opportunity, it can be difficult to predict exactly what economic opportunities it will create for San Leandro. What is certain, however, is that Lit San Leandro provides an enormous competitive advantage as our economy becomes more and more dependent on broadband.

***“Lit San Leandro has made a dramatic impact on our business. As user of an AT&T T1, we were literally getting choked from lack of internet connection capacity.***

***The bottom line is that Lit San Leandro made every employee more efficient and productive and gave our dealership a competitive edge over every other dealership. The speed is absolutely incredible, it is as if we are not on the internet, everything is instantaneous.***

***The new favorite activity for our employees is to show off our internet speed; in fact one of our selling points to new prospective employees and our customers is our internet speed. Everyone is just amazed, giving all of our competitors a digital envy.”***

***- Steve Song, President, F.H. Dailey Chevrolet (Lit San Leandro's 2<sup>nd</sup> Customer)***

The initial construction of Lit San Leandro loop is fully funded and does not require an external investment. However, to most effectively leverage the \$3 million private investment, the City of San Leandro is seeking EDA funding to expand the conduit system beyond the limits of the current loop into under-served commercial and industrial areas. For businesses that are not located close to the loop connecting can be costly; ranging from tens to hundreds of thousands of dollars in initial construction. Expanding the system to strategically target under-served business districts vastly increases the potential economic benefit of the project. In addition, expanding from one loop to a series of smaller, interwoven loops increases the reliability of the

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<sup>2</sup> <http://chattanooga.gov>

system. If a disruption occurs at one point along the line, data can easily and automatically be re-routed to its destination, with no loss of connectivity.

The proposed expansion project includes the construction of an additional 7.5 miles of conduit creating five additional loops and strategically bringing service to an additional 1,000 existing businesses. The proposed expansion segments are detailed in the maps provided with this application and include the following:

- Expansion to the north along Doolittle Drive: These segments will provide service to the parts of San Leandro that presently suffer from the worst broadband availability in the City. This expansion also brings the project to the City's border with Oakland, facilitating connections to the City of Oakland, the Port of Oakland, and businesses within Oakland's Airport Area.
- A connection to San Leandro's Shoreline area, the site of a major planned mixed-use development. City staff and the site developer have both recognized that current broadband availability at this site is an impediment to high-quality development. The Lit San Leandro extension would turn this challenge into a competitive advantage for the Shoreline site, enabling the project to compete for a high-tech anchor tenant for the office component of the project.
- Extension into industrial areas along Catalina Street, Burroughs Avenue, Griffith Street, and Farallon Drive. Like the Doolittle Drive area, these parts of San Leandro presently suffer from inadequate broadband service. A major vacancy is also expected in this area when VF Corporation (Jansport, The North Face) completes a planned move to another jurisdiction later this year. Access to a fiber optic network will greatly increase the possibility of attracting a high-quality tenant to that site.
- Expansion into industrial areas along Alvarado Street, Teagarden Street, and Fremont Avenue. This expansion will provide service availability to over 300 existing businesses and several vacant properties, such as those noted by Reynolds & Brown in their support letter. This component of the project also strengthens the viability of the entire Lit San Leandro system by creating an additional loop which provides needed redundancy if a disruption ever occurs elsewhere in the system.

All new conduit will be installed by boring (directional drilling) under existing City streets. Boring is cost effective and allows the installation to be completed with minimal disruption to traffic and neighbors. The project also includes the installation of pull-boxes, used to install the fiber and to provide access points for any entity wishing to connect to the system.

To make use of the new conduit segments, San Leandro Dark Fiber plans to spend another \$250,000 to \$500,000 of private investment to install fiber optics. The fiber optic cables will be privately owned (and therefore are not technically a part of the project for the purposes of this application). All new conduit, however, will be located within public right-of-way and will be owned by the City. Additionally, the License Agreement stipulates that 10 percent of all fiber installed will be dedicated to the City for its own use, without restrictions.

In addition to serving San Leandro businesses, Lit San Leandro has shown great promise as a regional endeavor. As noted above, one of the proposed extension loops brings the fiber system north along Doolittle Drive to the San Leandro-Oakland border, facilitating a partnership with Port of Oakland and bringing much needed infrastructure to the Oakland Airport Area businesses. These regional partners have expressed great enthusiasm regarding the possibility of taking advantage of the Lit San Leandro system (please see support letters from the Airport Area Business Association and Port of Oakland).

The City is also working regionally with cities in Alameda, Contra Costa and Solano Counties through the East Bay Broadband Consortium to explore opportunities to expand Lit San Leandro, tie it in with Lawrence Berkeley National Lab's system and create a state-of-the art regional broadband system. The East Bay is a cradle of innovation and one of the top regions nationally in attracting venture capital investments. Without a robust fiber optic network, one of the nation's most important innovators could dry up.

Although not technically part of the project as defined in this application, the City is also creating a related business incentive grant program to assist local businesses with the capital costs of building the lateral connections needed to connect to Lit San Leandro, thus increasing the project's ability to attract new industries and help local companies grow and expand employment.

Work is also underway to connect the main branch of the San Leandro Library to the Lit San Leandro network as a demonstration project and community amenity. All of the Library's workstations and conference rooms will be wired for 10 Gbps connections by the end of June 2012.

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### **A.3. Economic Development Needs**

a. Does the region in which the project will be located have a Comprehensive Economic Development Strategy (CEDS)?

**No**

If **No**, what alternate strategic planning document do you wish to govern this investment?

*Building on our Assets: Economic Development and Job Creation in the East Bay*  
East Bay Economic Development Alliance, October 2011 (attached)

b. Briefly describe the economic development needs of the region and how the proposed investment addresses the goals and objectives of the CEDS for the region or the alternate strategic planning document as noted above. (See 13 C.F.R. part 303.)

As noted in the *Building on our Assets* report:

"Despite declines in employment overall, manufacturing remains a source of high-wage jobs and continues to play a critical part in the East Bay economy. The East Bay has seen its concentration (share of total employment) in manufacturing jobs increase relative to the U.S., California, and the rest of the Bay Area since 1995. This is particularly true for specialized and advanced manufacturing activities that support the high-tech sectors."

San Leandro is critical hub in the region for advanced manufacturing, and the City's zoning and building stock are extremely favorable for continued success within these sectors. The present lack of adequate broadband, however, is a significant impediment – one that this project aims to address.

The report also cites Professional, Scientific and Technical Services (PSTS) industries as a future driver of regional economic success:

“The region’s success in certain advanced manufacturing and PSTS subsectors is not a coincidence; they are interrelated industries that provide a core of strength upon which the East Bay can build over time. The East Bay’s strength in subsectors like biotechnology and pharmaceuticals is tightly connected to its strength in medical equipment manufacturing activities, for example.”

As San Leandro continues to develop new, transit-oriented office space downtown, the PSTS sector is the most likely target for tenants. For those sectors, broadband is basic infrastructure; a crucial component of any location decision. Lit San Leandro will give the City a competitive edge in attracting these businesses as well.

c. Briefly describe the economic conditions of the region described in A.1, as well as the economic adjustment problems or economic dislocations the region has experienced (or is about to experience) and the regional impact of these conditions.

On the whole, San Leandro and East Bay employment trends have mirrored those at the state level. One particularly significant impact in 2010 was the loss of 5,100 jobs in transportation manufacturing in the East Bay as the NUMMI automotive plant in neighboring Fremont closed. In 1961, manufacturing accounted for 27.7 percent of the East Bay’s non-farm jobs. Today, manufacturing creates 8.9 percent of employment – or nearly 71,000 jobs – in the East Bay. More than half of these jobs are in advanced manufacturing activities that are closely linked to the region’s strengths in PSTS.

Unemployment in San Leandro in March 2012 was presently 9.4 percent, representing over 4,000 members of the workforce who are without jobs. This represents a dramatic increase from 2007, when the annual unemployment rate was under 5 percent. Given how much of the City’s nonresidential building stock is industrial, successfully transitioning those properties to accommodate 21st Century growth sectors will be critical to the City’s long-term economic vitality.

A Commercial Broadband Strategy was also undertaken by the City in 2011 to identify shortfalls and outline policy and economic development strategies to improve broadband service for businesses. Expansion of Lit San Leandro was identified as a priority project and the City has dedicated significant resources to support Lit San Leandro and expansion of the loop as outlined in this application.

***Access to high speed, reliable links to the Internet and internal networks is a basic, 21st Century utility, as vital to economic development as electricity or water.”***

- *San Leandro Commercial Broadband Strategy, 2012*

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**A.4. Investment (Project) Impact and Fit with EDA Funding Priorities** Discuss how the proposed investment satisfies EDA’s Investment Policy Guidelines as set forth in 13 C.F.R. § 301.8, as well as the EDA funding priorities set forth in the applicable Federal Funding Opportunity (FFO) announcement on [www.Grants.gov](http://www.Grants.gov).

#### Collaborative Regional Innovation

The City and San Leandro Dark Fiber have been in discussions with Alameda County, the City of Oakland, and the Port of Oakland to explore opportunities for expanding the Lit San Leandro into other jurisdictions. Of the proposed system expansions, the Doolittle Drive extension in particular will set the stage for the development of a regional system because it will run fiber to the City's border with Oakland which is also extremely close to the Oakland International Airport, part of the Port's broadband network.

Given that improvements in broadband availability will be most successful when addressed on a regional level, the City is an active participant in the East Bay Broadband Consortium regional initiative organized to improve broadband deployment, access, and adoption in Alameda, Contra Costa, and Solano Counties. Lit San Leandro, including the proposed extension, is an essential piece of the region's broadband strategy.

#### Public/Private Partnerships

Lit San Leandro is a public/private partnership in every sense. This fiber optic system would not be possible without initiative and investment from a private partner and infrastructure and cooperation from the City. Neither party stands to realize significant monetary profits from this initiative, yet both recognize the economic development potential it holds for the City, businesses and the East Bay region as a whole. Ultimately, the City will own all conduit and associated pull-boxes and equipment in the public right-of-way, as well as ten percent of all fiber. The remainder of the fiber, and the bulk of the system's bandwidth, will be owned and managed by a private cooperative, San Leandro Dark Fiber. This model ensures that each party can stick to doing what it does best. The City will provide the required infrastructure backbone and the private sector partner will manage the process of helping local businesses connect to the system. Both parties are actively engaged in the process of marketing this tremendous opportunity to existing San Leandro business as well as start-up and established companies in industries that require high bandwidth.

#### National Strategic Priorities

The Lit San Leandro project matches perfectly the national priority of encouraging job growth and business expansion related to advanced manufacturing and information technology infrastructure. Although the system will benefit any company that requires high Internet bandwidth, a focus of the project is to serve as a catalyst for advanced manufacturing and industrial uses in the City's industrial areas. This is evidenced by the expansion routes detailed in this funding application. Overwhelmingly, the system expansions have been designed to provide service to industrial areas that presently lack adequate broadband service.

#### Global Competitiveness

Traditional manufacturing jobs have left San Leandro for the low cost labor and real estate found in other states and developing countries. Rather than abandoning its industrial legacy, however, San Leandro is focused on the types of industry that are less susceptible to off-shoring; advanced manufacturing, just-in-time production, and 3-D printing, to name a few. With close proximity to world-class research institutions such as UC Berkeley and the Lawrence Berkeley National Laboratory, San Leandro is an ideal home for start-up businesses that spin-off from academic institutions. With easy access to Oakland International Airport and the Port of Oakland, along with the possibility of expanding Oakland's Foreign Trade Zone, San Leandro also offers a prime opportunity to deliver goods to markets around the world.

#### Environmentally-Sustainable Development



San Leandro is an active partner in the East Bay Green Corridor, a partnership of eight cities, three educational institutions and Lawrence Berkeley National Lab. The Green Corridor's mission is to create a thriving region of green technology innovation, commercialization and local economic development in a manner that creates high quality jobs and meets environmental and social goals. In 2010, the City adopted a Climate Action Plan that included a goal to reduce greenhouse gas emissions in the City to 25% below 2005 levels by 2020. We expect that clean-tech companies will be among the greatest beneficiaries of Lit San Leandro's bandwidth opportunities and we intend to work closely with all City businesses to ensure that their operations are consistent with the community's environmental goals.

#### Economically Distressed and Underserved Communities

The San Leandro community is not generally inclined to focus on negatives when crafting economic development strategies. Nevertheless, the City has experienced a substantial increase in unemployment in recent years as California tended to suffer from the economic downturn more than the nation as a whole. Unemployment in San Leandro is presently at 9.4 percent, almost double the rate from 5-7 years ago. Part of that increase is due to the 2010 closure of the New United Motor Manufacturing, Inc. automotive plant in nearby Fremont. A goal of the Lit San Leandro project is to contribute to the ongoing reduction in our unemployment rate by creating quality jobs for residents.

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**A.5. Applicant's Capability** Briefly describe the applicant's capability to administer, implement, and attract private sector investments to the project.

The City has demonstrated its ability to successfully install conduit for fiber optics. The 11-mile conduit loop that forms the backbone of the Lit San Leandro system was initially constructed to enable the installation of City-owned fiber used for internal data communications and the City's traffic control systems. The City has the engineering staff and expertise needed to design the expansion segments and manage the work of construction contractors.

Additionally, the private investment needed to construct Lit San Leandro has already been secured. The City is now actively partnering with San Leandro Dark Fiber and the San Leandro Chamber of Commerce to market the system to interested businesses. The response so far has been extremely positive and we fully expect to have several businesses connected within the first year of operation.

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**A.6. Proposed Time Schedule for the Project** Provide a proposed time schedule for completion of the project, including when (month/year) the project will begin and end. Explain any potential issues that could affect project implementation.

The initial loop is already under construction. The expansion segments that are the subject of this application can be initiated as soon as funding is secured. Realistically, construction could begin in September 2012. Although many segments can be completed within a matter of weeks, a few of the expansion segments will require encroachment permits from Caltrans or railroad companies. That process can sometimes be lengthy. We expect the full project to be completed within two years of the receipt of the grant.

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**A.9. Non-EDA Funding for the Project** a. Identify the source, nature and amount of all non-EDA funds, including in-kind contributions (non-cash contributions of space, equipment, services, or assumptions of debt; see definition of "In-Kind Contribution(s)" in 13 C.F.R. § 300.3). Explain the status of all funding commitments, including the date the funds will be available from each source, and describe any conditions or restrictions on the use of such funds. If in-kind contributions are included, explain the basis on which they are valued.

Consistent with EDA funding guidelines, the City proposes that 50 percent of the project cost come from the EDA grant and the remaining 50 percent come from a local match. The local match is comprised of the following components:

1. **Right-of-way (\$1.6m):** All of the Lit San Leandro expansions will be constructed in public right-of-way. In doing so, the City pays an opportunity cost by giving some of the capacity to install other utilities or items of public benefit within that land. Based on the most recent available comparable sales transactions, the City has valued right-of-way at \$13.50 per square foot. This is an estimated value for unimproved industrial land. We believe this is a conservative estimate. The required amount of right-of-way is based on 3 feet of required width for each linear foot of the Lit San Leandro expansion. Based on engineers' estimates, this is the amount of space needed to conduct the necessary boring and pull box installation.
2. **Cash (\$502k):** For the remaining share of the local match, the City proposes to use available, unencumbered local funds. This funding will come from a combination of the General Fund and the balance received from a Development Fee for Street Improvements.

All components of the local match are freely available and not encumbered for any other purposes.

#### **Additional Local Investment**

Although the initial 11-mile loop is not technically part of the project in this application, it does demonstrate a sizable local investment in Lit San Leandro. The City's initial investment in conduit is worth several million dollars in today's construction cost and by entering into the license agreement with San Leandro the City has forfeited the opportunity to use that conduit for other purposes. Also, as noted above, San Leandro Dark Fiber will pay roughly \$3 million for installation of fiber optics in the initial loop. That cost includes testing the conduit, purchase of the fiber, purchase and installation of locking pull boxes. San Leandro Dark Fiber is also funding the costs of boring and conduit installation along two segments of the main loop where problems were identified with existing conduit. Both the City and San Leandro Dark Fiber have also invested substantial staff resources to market Lit San Leandro.

Additionally, one segment of the proposed expansion already has some areas drilled for conduit and others with conduit pre-installed (see segment D in the cost estimate). Although pre-existing investment does not technically count toward the local match, this nevertheless reflects a City investment that reduces the project cost by roughly \$100,000.

Combined, the local investment in the initial fiber loop is more than \$3 million, and this amount in excess of the local 50 percent match detailed above.