

# Pittsburg Roll Out

Case Study.



# Project Overview

Rolling out a 10 Gig fibre city-wide network to over 75,000 people.

Located 37 miles northeast of San Francisco at the point where the Sacramento and San Joaquin rivers meet in Contra Costa County, Pittsburg is well known as a city of both progress and promise.

Known for reinventing its industrial centre from steel to technology, Pittsburg has recently grown into a pleasant community of landscaped parks, recreational facilities, shopping centres, affordable housing and planned business and commercial development zones.





# The Challenges

Given the geography, the project had several challenges to take into account, including multiple risks from natural hazards including earthquakes, landslides, wildfires and floods. Considerations were also made to the petrochemical processing plants along the waterfront. The design therefore needed to consider these potential hazards and mitigate any risks as far as possible.

## **Limiting Digital capabilities**

Prior to this project businesses and residents had limited broadband access that also lacked future proofing and economic viability. The city needed to ensure they closed the Digital Divide and continued to support their Industrial presence for the long term.

## **Complex projects simplified**

We used our tried and tested modular programme to progress the city design from initial feasibility right through to a complete engineering design that was ready for construction and service integration.

Using our experienced team of designers who had already delivered projects across other key US states, we provided a single point of contact approach guided by Prince 2 project management methodologies. This documented approach provided great confidence to the project team.

# The Solution

Taking the experience from previous successful projects, NetPMD's design experts used our unique modular approach to progress the project from initial feasibility through to a full build-ready design of a 10Gig capable fibre network and integration plan.

***"The City of Pittsburg is excited for the opportunity to work with SiFi Networks to bring a fiber optic network to its residents and businesses."***

Jordan Davis, Assistant to the City Manager





Initial feasibility and design needed to take into consideration future growth and requirements for home and businesses. This meant identifying geological fault lines, liquefaction and landslide zones, high fire risk areas and areas susceptible to flooding.

Railways, bridges and water pipelines (both above and below ground) running through the middle of the city meant any accurate city-wide duct design needed careful micro trenching planning. Our report also included suggested core equipment locations.

A rapid analysis provided an approximate construction distance serving a defined set of addresses, including 21,000+ fibre endpoints.

We also identified third-party provider carriers to provide a diverse dark fibre backhaul to connect the city network to the existing redundant data centres already located in other cities in California.

Now that the city is under construction, our integration services will configure the active network equipment including full project management, operational handover documentation.



# The Benefits

Ben Bawtree-Jobson, CEO, SiFi Networks – ***“Pittsburg is an exciting project for all involved and we would like to thank NetPMD for their extensive support throughout this project. From the initial feasibility, through to design and integration services they were instrumental in helping us develop this City-wide project”.***

26300+ Homes and Businesses  
21000+

*The network is open access, this gives residents a choice of broadband suppliers. This allows for competitive pricing. The project means that the residents of Pittsburg now have premium gigabit internet and Wi-Fi services with lower costs, increased choice, and higher reliability than they did before.*

*All residents and businesses with superfast broadband can benefit from simultaneous upload and download speeds. Households are now able to stream content from multiple devices at one time with no impact on individual experiences.*

*The city and its residents will benefit from increased job opportunities, better access to healthcare and education resources and a much-improved home working and learning experience. Enabling ‘smart city’ capability will bring more digital and IOT opportunities than was previously possible.*