

# IP Networks, Inc.

Utility-based Last Mile & Large Scale  
Private Telecommunications Networks –  
Designed for Mission Critical  
Networking Requirements

“Fiber: Route redundancy versus carrier redundancy - there is a difference”

For additional information contact

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Proprietary and Confidential



# Data Centers and Other Mission Critical Facilities

- Mission critical facilities such as data centers are designed with redundant and highly reliable infrastructure such as UPS systems, backup generators, fire suppression systems, security systems.
- Mission critical facilities are designed to survive seismic events and are typically outside of flood zones.
- Design criteria dictate no single points of failure and operational carry-through after major natural disasters such as earthquakes.

## *Critical Questions?*

- How redundant is your telecommunications network?
  - Last mile and building access. Common carrier or cable?
  - Long haul network. Common carrier or cable?
  - Connections to other data centers. Common carrier or cable?
  - How many single points of failure?

## Does your Mission Critical Facility have Single Points of Telecommunications Failure?

- Telecommunications carrier redundancy is not necessarily physical redundancy because of shared fiber cable, conduit and other infrastructure such as common trenches.
- IP Networks incorporates diverse paths into its network that are independent of other telecommunications infrastructure.
- IP Networks enters buildings through electrical conduits or completely separate paths.
- IP Networks can offer internal N-1 and N-2 redundancy.

# IP Networks Infrastructure Diversity

- Diversity at the Building Access and Entry Level
- Diversity at the Local Loop Level
- Diversity at the Regional Backbone Level
- Uniquely protected Infrastructure (e.g. 'deeper' in the street)

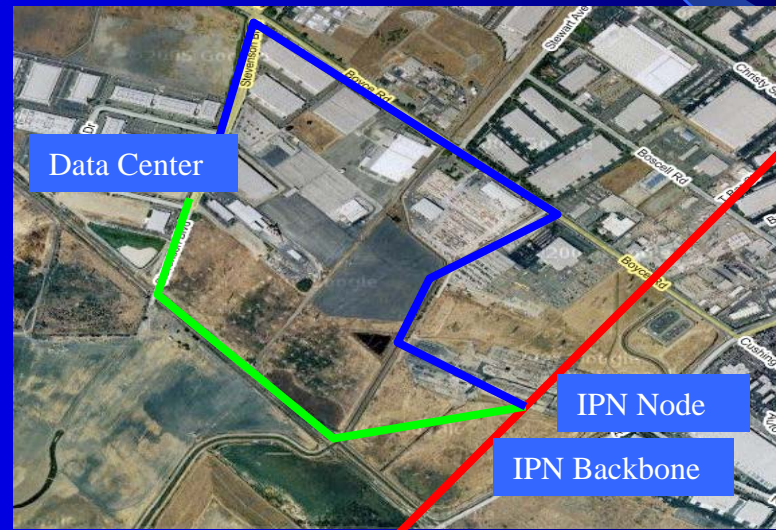
# IP Networks Local Diversity

## Using Separate Access Points at a Building Level



# IP Networks Area Diversity

## Using Separate Access Paths from Backbone Fiber



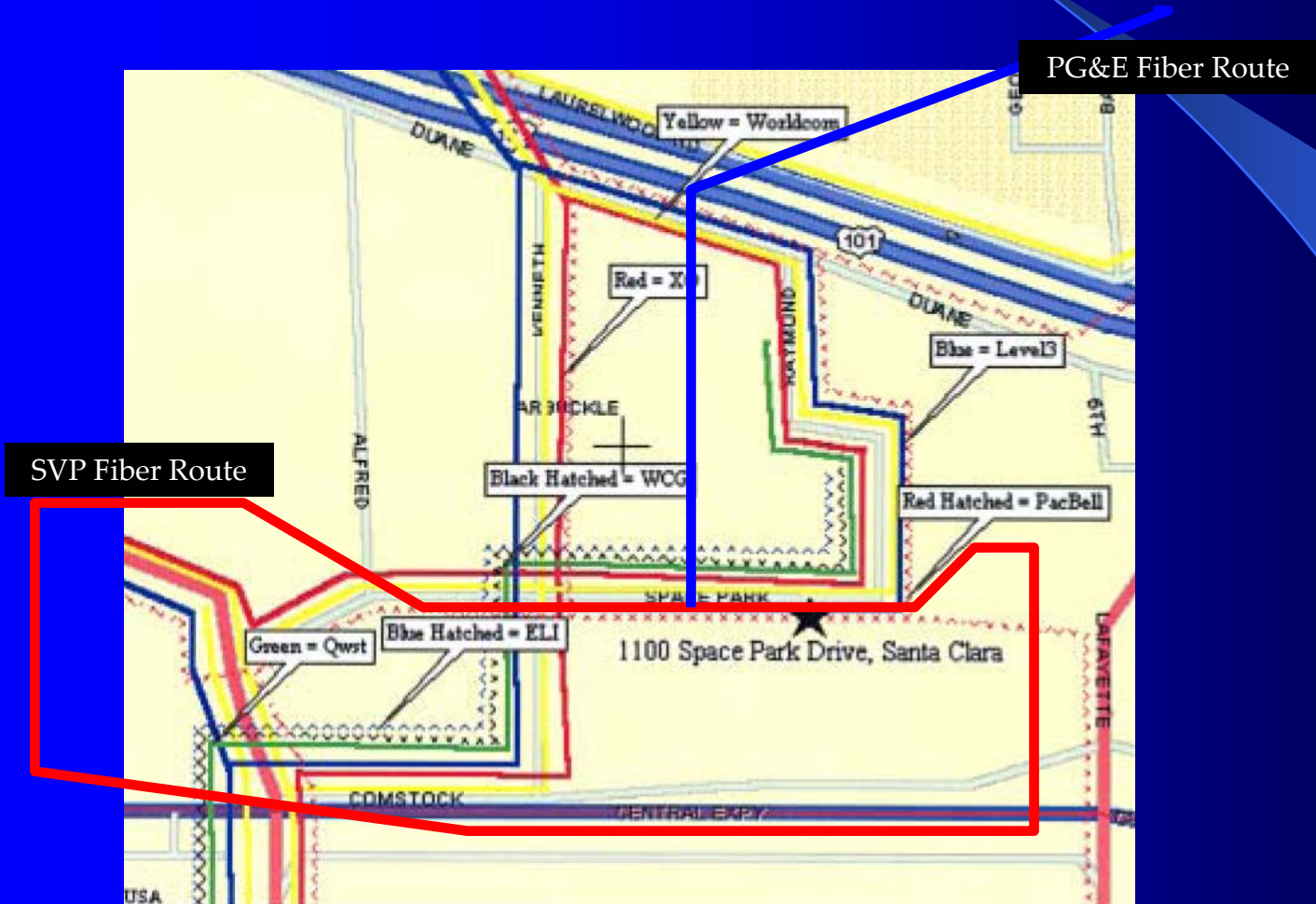


# IP Networks Regional Backbone Diversity

Using Separate Infrastructure based on Electric Utility Infrastructure that is redundant to Common Telecommunications Infrastructure such as the El Camino Trench



# Potential 1100 Space Park Alternative Fiber Access Options





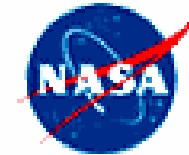
# IP Networks

## Unique Value Proposition

**Build and operate the telecommunications network that meets the mission critical networking requirements of Silicon Valley, metro San Francisco and Beyond**

- By leveraging infrastructure installed by utility companies
- Create the most efficient and flexible all-optical platform
- Build and operate Last Mile and Large Scale Networks at unparalleled reliability and cost effectiveness
- IP Networks provides telecommunications networks that are fully independent of the traditional telecommunications infrastructure.
- Value proposition created around Business Continuity & Disaster Recovery at multiple levels

# Major Data Centers Already Connected to IP Networks or planned in 2006



Market Post  
**TOWER**  
55 SOUTH MARKET

# IP Networks

## PG&E Relationship

### Openly promoted as PG&E's strategic partner

- PG&E 2004 ISTS Annual Report "... strategic partnership with IP Networks."

### Irrevocable agreements

- California Public Utilities Commission (CPUC) approved
- Allows IPN blanket access to install new fiber optic cabling in all conduit, poles, towers & substations
- Encompasses over 200,000 miles of right-of-ways

### Access to utility infrastructure that serves 1 in 21 Americans

- Guaranteed building lateral and street facilities
- In addition to new fiber installations, able to lease over 1,000 route miles of existing Last Mile and Backbone fiber optic networks
- Internal communications network qualifies as 4th largest telecommunications system in California only behind AT&T/SBC, Verizon & State of California