



The South Bay Fiber Network (SBFN) Frequently Asked Questions (FAQs)

What is the South Bay Fiber Network?

The South Bay Fiber Network is a dedicated fiber-optic network developed for the use of South Bay Cities Council of Governments (SBCCOG) and its membership (a consortium of 16 South Bay cities: Carson, El Segundo, Gardena, Hawthorne, Hermosa Beach, Inglewood, Lawndale, Lomita, Manhattan Beach, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates and Torrance, along with parts of Los Angeles City and County). The network provides reliable and secure access points to all designated member sites. The core network is protected via ring architecture which will automatically re-route traffic in the event of a system disruption. Bandwidth availability starts with 1 gigabit (GB) service and will scale to 2 GB, 10 GB, and higher speeds as members require. The system also has two diverse internet “hubs” or “points of presence” (“POP”) interconnected to it located at world-class data centers in El Segundo and Hawthorne.

Who else will benefit from the SBFN?

The new scalable network was designed to accommodate future geographic expansion and data growth. Initially, in addition to SBCCOG member city halls, the following agencies will also benefit from access: Beach Cities Health District, the South Bay Workforce Investment Board (SBWIB), LA Metro Transportation Authority, Los Angeles County Department of Public Works, West Basin Municipal Water District, the Lundquist Institute for Biomedical Innovation, located at Harbor-UCLA Medical Center in Torrance and the SBCCOG office.

Who built the network?

A team led by American Dark Fiber (ADF) won the competition to assemble the network from existing fiber systems owned by wholesale providers, construct new elements to close the gaps, maintain the network, and provide customer service.

The ADF team includes HP Communications to manage new construction and Race Communications to provide customer service.

Who paid for implementation of the network? And who pays for the operations?

All capital costs for the initial South Bay build were paid for by the SBCCOG with Measure M subregional funds. The participating agencies paid no capital costs. The feasibility study for this project was paid for by the South Bay Workforce Investment Board, with an additional contribution from Los Angeles County Supervisor Mark Ridley-Thomas.

Where does the SBFN Go?

ADF's Internet Service Provider (ISP) partner, Race Communications, distributed its internet services to the SBCCOG network participants from the points of presence references above. A map (see bottom of document) shows the general routing expected to be operational by January of 2021 for all participants. Some are already connected.

How is the Network Configured?

The primary system includes a ring-based network with lateral connections from each building interconnected to the ring.

What are the initial price points for service on the network?

ADF and its service provider (Race Communications) have created a menu of services for the SBCCOG membership and participating agencies. The services include dedicated internet connectivity and/or point-to-point "transport" service connections. The ADF-led team has developed special price points for the initial participants that start with Internet pricing of \$1,000/month for 1 GB level of service, roughly half the cost of what commercial rates might be for similar service in the South Bay. Additional service levels are available (i.e., 2GB, 10GB, etc.) as needed by respective SBCCOG members and participating agencies.

ADF has also provided price-protection by including automatic price reviews as additional buildings become connected or after set periods have elapsed (i.e. every three-years). The baseline circuit costs include the costs of the underlying SBFN-ring and connections to the IP POP's (located in El Segundo and Hawthorne).

SBCCOG “SBFN” Service Pricing Schedule

Service Speed	Internet Pricing	(Data) Transport Pricing
1 GB (1000 Mbps)	\$1,000/mo.	\$ 900/mo.
2 GB (2000 Mbps)	\$2,000/mo.	\$1,800/mo.
10 GB (10,000 Mbps)	\$2,750/mo.	\$2,475.00
Other (i.e., 40GB, 100 GB, etc.)	ICB	ICB

G subject to core

network upgrade to 100 Gb

Additionally, SBCCOG member price points will drop by 5% after the aggregate monthly revenue from a combination of internet and transport services provided to SBCCOG members exceeds \$55,000. Further price reviews (for reductions) would continue periodically over time.

What benefits do the SBCCOG and its members get from the system?

Aside from incredibly low pricing of high-speed internet services, the SBFN will provide a platform for the following examples of “smart city” applications for SBCCOG:

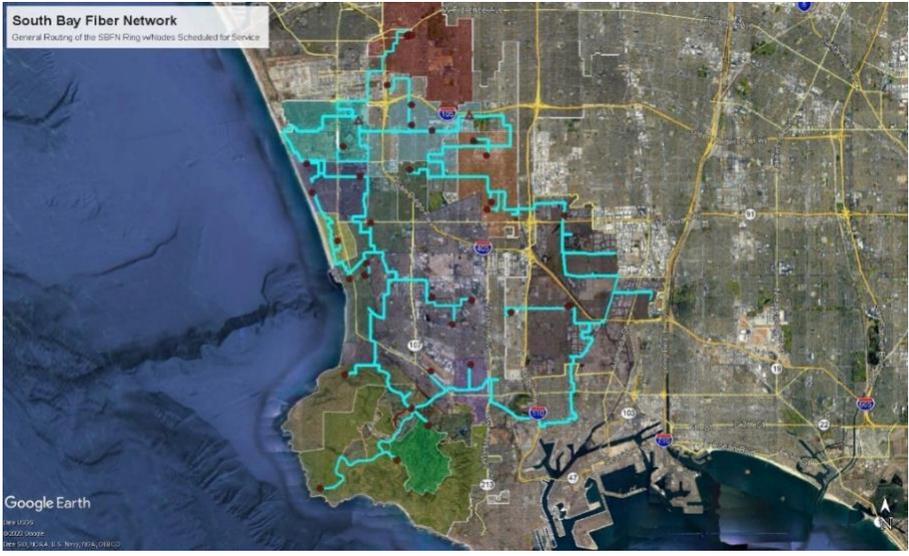
- **Work-from-Home Governments** – High speed internet will support cities’ accelerated transition to telework through COVID-19 and beyond, and the evolution to “smart city halls” that can provide virtual municipal services and interactive distance learning to residents, with outcomes of reduced traffic and greenhouse gas emissions through “trips not taken.” Enhanced online services will be available to their residents, such as permitting and processing applications.
- **Improved Traffic Management** – Real-time traffic information from LA County’s Information Exchange Network (IEN) will be available for each participating agency. In partnership with Metro’s Regional Integration of Intelligent Transportation Systems (RIITS), South Bay cities will be able to combine and share transportation data as a resource for congestion management, improved transit services, and support of transportation demand management (TDM) programs.

- **Future Autonomous Vehicle (AV) Support** – High speed and resilient broadband capacity will be necessary for vehicle-to-network and vehicle-to-vehicle communications for a safe and reliable AV transportation system.
- **Telehealth and Telemedicine Opportunities** – Applications include remote diagnostics, video appointments, transmission of large files, such as MRIs, scans, etc., initially to be utilized by Beach Cities Health District and Lundquist Institute for Biomedical Innovation, with possible future expansion to other health care providers.

Additionally, low-cost broadband capacity will also allow participating agencies to:

- Create resiliency for IT services (i.e. emergency preparedness and data back-up)
- Efficiently use cloud-based software applications for day-to-day business
- Provide necessary IT capacity for future video and audio-based municipal software applications
- Provide for shared municipal software platforms with other public agencies
 - Online permitting or applications with Los Angeles County
 - Sub-regional geographic information system (GIS) tools with other cities and the SBCCOG
 - Regional transportation and planning tools with Metro and LA County
- Provide free municipal WIFI in public spaces, parks and buildings
- Provide infrastructure that may be developed for commercial and residential use

Having high-speed broadband available throughout the SBCCOG-region is an economic driver. ADF and its team are coordinating with the SBCCOG and its membership to actively leverage the network for maximum economic development purposes (providing advanced high-speed services at low-cost/wholesale rates) throughout the region.



South Bay Fiber Network ring connecting South Bay cities: from Inglewood (north), coastal cities (west), Palos Verdes Peninsula (south) to Carson (east)

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